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AV32H20EUS
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JVC

SERVICE MANUAL

COLOUR TELEVISION

BASIC CHASSIS
MF II

AV32H20EUS
AV28H20EUS
AV28H20EUB

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AV32H20EUS
AV28H20EUS
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SPECIFICATIONS

Item	Content	
	AV32H20EUS	AV28H20EUS / AV28H20EUB
Dimensions (W × H × D)	855mm × 550mm × 568mm	780mm × 509mm × 499mm
Mass	53.6kg	40.2kg
TV RF System	CCIR (B/G,D/K,I ,L, L')	
Colour System	PAL / SECAM / NTSC (Only in EXT mode)	
Stereo System	A2 (B/G,D/K)/ NICAM (B/G,I,D/K,L)	
Teletext System	FLOF (Fastext) TOP (German system) WST(World Standard system)	
Receiving Frequency		
VHF	47MHz ~ 470MHz	
UHF	470MHz ~ 862MHz	
French CATV	116MHz ~ 172MHz / 220MHz ~ 469MHz	
Intermediate Frequency		
VIF Carrier	38.9MHz (B/G, I ,L)/ 33.95MHz (L')	
SIF Carrier	33.4MHz (5.5MHz:B/G) / 32.9MHz (6.0MHz:I) / 32.4MHz (6.5MHz:L, D/K) / 40.45MHz (6.5MHz:L')	
Colour Sub Carrier Freq.		
PAL	4.43MHz	
SECAM	4.40625MHz/4.25MHz	
NTSC	3.58MHz / 4.43MHz	
Power Input	220 – 240 V AC, 50Hz	220 – 240 V AC, 50Hz
Power Consumption	187W(Max) / 138W(Avg), standby : 2.6W	178W(Max) / 125W(Avg), standby : 2.6W
Aerial Input Term	75 Ω unbalanced, Coaxial	
Picture Tube	Visible size : 76cm, Measured diagonally	Visible size : 66cm, Measured diagonally
High Voltage	$31.0kV^{+1kV}_{-1.5kV}$ (at zero beam current)	
Speaker	(16cm × 4cm) oval type × 2	
Audio Output	7.5W + 7.5W	
EXT-1/EXT-2/EXT-3 (Input / Output)	21-pin Euro connector (SCART socket)	
S / Video	Y : 1Vp-p POSITIVE (Negative sync Provided, when terminated with 75Ω) C : 0.3Vp-p (Burst signal, when terminated with 75 Ω)	
EXT-4 (Input) Video	1Vp-p 75 Ω (RCA pin jack)	
Audio (L/R)	500mVrms(-4dBs), High Impedance (RCA pin jack)	
S / Video	Y : 1Vp-p POSITIVE (Negative sync Provided, when terminated with 75Ω) C : 0.3Vp-p (Burst signal, when terminated with 75 Ω)	
AUDIO OUT (Variable)	0 ~ 1Vrms, Low Impedance (RCA pin jack × 2)	
Headphone jack	Stereo mini jack (φ 3.5mm)	
Remote Control Unit	RM-C54H (AAA/R03 dry battery × 2) : (AV32H20EUS, AV28H20EUS) RM-C50(AAA/R03 dry battery × 2) : (AV28H20EUB)	

Design & specifications are subject to change without notice.

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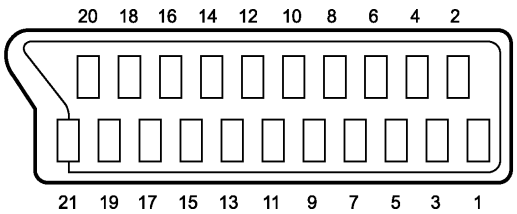
■21-pin Euro connector (SCART socket) : EXT-1 / EXT-2 / EXT-3

(P-P= Peak to Peak, B-W= Blanking to white peak)

Pin No.	Signal Designation	Matching Value	EXT-1	EXT-2	EXT-3
1	AUDIO R output	500mVrms(Nominal), Low impedance	O (TV OUT)	O (LINE OUT)	NC
2	AUDIO R input	500mVrms(Nominal), High impedance	O	O	O
3	AUDIO L output	500mVrms(Nominal), Low impedance	O (TV OUT)	O (LINE OUT)	NC
4	AUDIO GND		O	O	O
5	GND (B)		O	O	O
6	AUDIO L input	500mVrms(Nominal), High impedance	O	O	O
7	B input	$700mV_{B-W}$, 75Ω	O	O	NC
8	FUNCTION SW (SLOW SW)	Low : 0-3V, High : 8-12V, High impedance	O	O	O
9	GND (G)		O	O	O
10	SCL3		NC	O	NC
11	G input	$700mV_{B-W}$, 75Ω	O	O	NC
12	SDA3		NC	O	NC
13	GND (R)		O	O	O
14	GND (Y_S)		O	NC	NC
15	R / C input	R : $700mV_{B-W}$, 75Ω C : $300mV_{P-P}$, 75Ω	O (only R)	O	O (only C)
16	Ys input	Low : 0 - 0.4, High : 1 - 3V, 75Ω	O	NC	NC
17	GND(VIDEO output)		O	O	O
18	GND(VIDEO input)		O	O	O
19	VIDEO output	$1V_{P-P}$(Negative going sync), 75Ω	O (TV)	O (LINE OUT)	NC
20	VIDEO / Y input	$1V_{P-P}$(Negative going sync), 75Ω	O	O	O
21	COMMON GND		O	O	O

[Pin assignment]



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SAFETY PRECAUTIONS

1. The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.

2. Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.

3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.

4. **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**
   Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND, the ISOLATED(NEUTRAL) : (⏚) side GND and EARTH : (⏚) side GND. Don't short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND at the same time.
   If above note will not be kept, a fuse or any parts will be broken.

5. If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See ADJUSTMENT OF B1 POWER SUPPLY).

6. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.

7. Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.

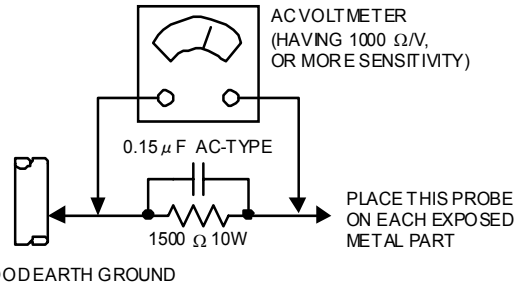
8. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

9. **Isolation Check**
   (Safety for Electrical Shock Hazard)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screwheads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

(1) **Dielectric Strength Test**
The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 3000V AC (r.m.s.) for a period of one second.
(. . . . Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)
This method of test requires a test equipment not generally found in the service trade.

(2) **Leakage Current Check**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

● **Alternate Check Method**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 ohms per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).



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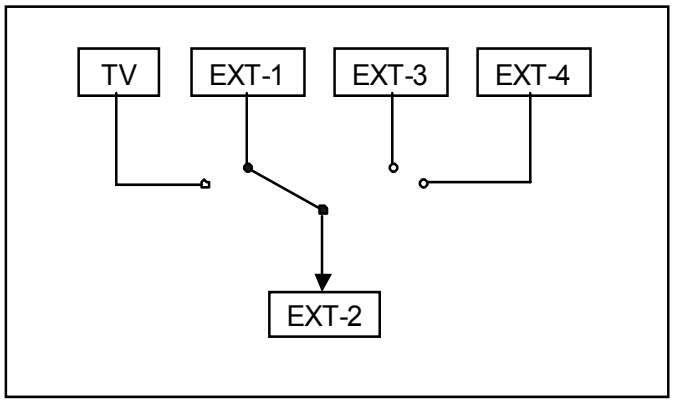
FEATURES

- New chassis design enable use of an interactive on screen control.
- The TELETEXT SYSTEM has a built-in FASTEXT (UK system), TOP (German system) and WST (world standard system) system.
- Because this TV unit corresponds to multiplex broadcast, users can enjoy music programs and sporting events with live realism. In addition, BILINGUAL programs can be heard in their original language.
- Users can make VCR dubbing of picture and sound by controlling the AV selector to select an optional source at the EXT-2 output shown in figure.



MAIN DIFFERENCE LIST

⚠	Model Name / Part Name	AV32H20EUS	AV28H20EUS	AV28H20EUB
	MAIN PWB ASSY	SMF-1401A-U2	SMF-1402A-U2	←
	POWER & DEF PWB ASSY	SMF-2401A-U2	SMF-2402A-U2	←
	CRT SOCKET PWB ASSY	SMF-3401A-U2	SMF-3402A-U2	←
	FRONT CONTROL PWB ASSY	SMF-8401A-U2	SMF-8402A-U2	←
⚠	FRONT CABINET ASSY	LC10376-020A-U	LC10662-023A-U	LC10662-024A-U
⚠	DOOR	LC20265-017A-U	←	LC20265-024A-U
⚠	POWER KNOB	LC30578-007B-U	←	LC30578-004A-U
⚠	REAR COVER	LC10378-004B-U	LC10664-003B-U	LC10664-001E-U
	JVC MARK	LC40354-003A-C	←	LC40354-001C-C
⚠	RATING LABEL	LC20379-027A-U	LC20379-026A-U	LC20379-025A-U
	EURO LABEL	AEM1052-063-E	AEM1052-064-E	AEM1052-096-E
	REMOTE CONTROL UNIT	RM-C54H-1C	←	RM-C50-1C

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SPECIFIC SERVICE INSTRUCTIONS

DISASSEMBLY PROCEDURE

REMOVING THE REAR COVER

1. Unplug the power cord.
2. Remove the 12 (28" models), 13 (32" model) screws marked **A** as shown in the Fig. 1.
3. Withdraw the rear cover toward you.

REMOVING THE CHASSIS

- After removing the rear cover.

1. Slightly raise the both sides of the chassis by hand and remove the two claws under the both sides of the chassis from the front cabinet.
2. Withdraw the chassis backward.
   (If necessary, take off the wire clamp, connectors etc.)

REMOVING THE SPEAKER

- After removing the rear cover.

1. Remove the 2 screws marked **B**, and remove the speaker holder as shown in Fig. 1.

NOTE: When removing the screws marked **B** of the speaker remove the lower side screw first, and then remove the upper one.

2. Remove the 2 screws **C** attaching the speaker.
3. Follow the same steps when removing the other hand speaker.

REMOVING THE AV TERMINAL BOARD

- After removing the rear cover.

1. Remove the 3 screws marked **D** as shown in the Fig. 1.
2. Remove the 2 claws marked **E** under the CHASSIS as shown in Fig. 2.
3. Remove the AV TERMINAL BOARD slightly in the direction of arrow **F** as shown in Fig. 2.

REMOVING THE POWER & DEF PWB

- After removing the rear cover.
- After removing the rear CHASSIS.

1. Remove the 3 screws marked **G**.
2. Remove the POWER & DEF PWB.

CHECKING THE PW BOARD

To check the back side of the PW Board.

1) Pull out the chassis. (Refer to REMOVING THE CHASSIS).
2) Erect the chassis vertically so that you can easily check the back side of the PW Board.

[CAUTION]

- When erecting the chassis, be careful so that there will be no contacting with other PW Board.
- Before turning on power, make sure that the wire connector is properly connected.
- When conducting a check with power supplied, be sure to confirm that the CRT EARTH WIRE (BRAIDED ASS'Y) is connected to the CRT SOCKET PW board.

WIRE CLAMPING AND CABLE TYING

1. Be sure to clamp the wire.
2. Never remove the cable tie used for tying the wires together. Should it be inadvertently removed, be sure to tie the wires with a new cable tie.

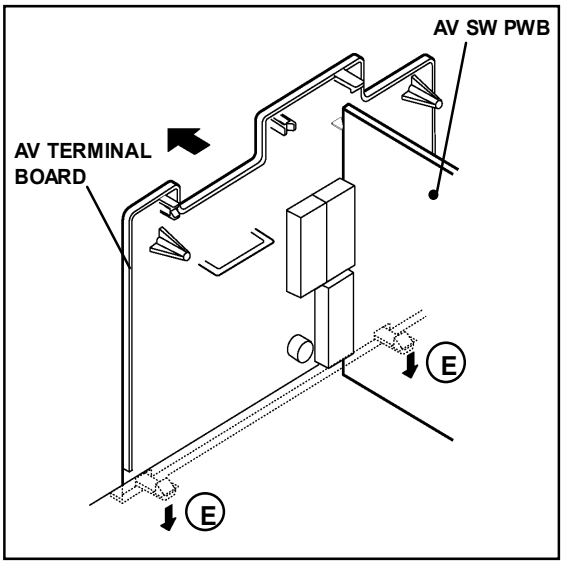

Fig. 2

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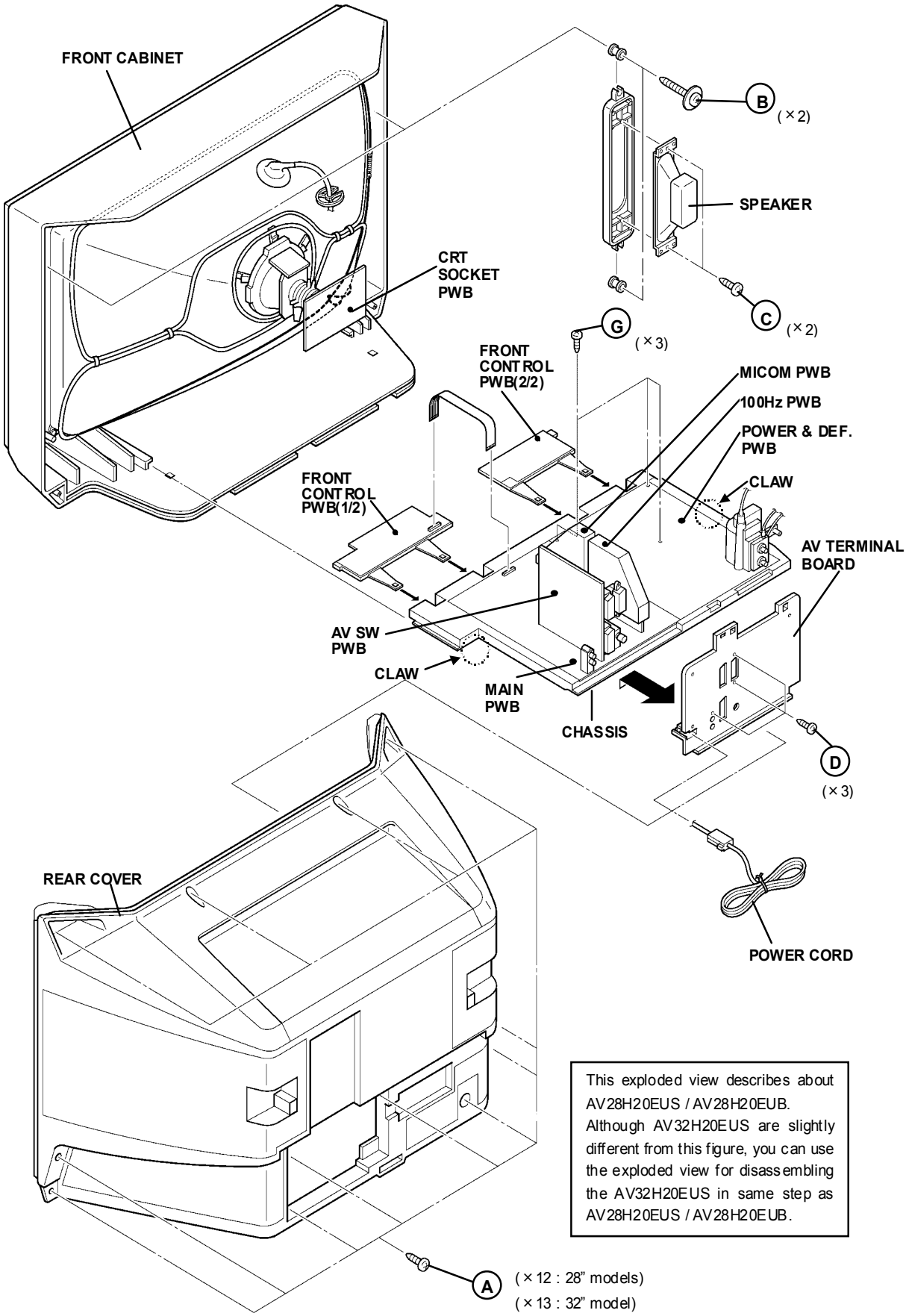

This exploded view describes about AV28H20EUS / AV28H20EUB.
Although AV32H20EUS are slightly different from this figure, you can use the exploded view for disassembling the AV32H20EUS in same step as AV28H20EUS / AV28H20EUB.

Fig. 1

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AV32H20EUS
AV28H20EUS
AV28H20EUB

REMOVING THE CRT

* Replacement of the CRT should be performed by 2 or more persons.
- After removing the cover, chassis etc.,

1. Putting the CRT change table on soft cloth, the CRT change table should also be covered with such soft cloth (shown in Fig.3).
2. While keeping the surface of CRT down, mount the TV set on the CRT change table balanced will as shown in Fig.4.
3. Remove 4 screws marked by arrows with a box type screw driver as shown in Fig.4.

- Since the cabinet will drop when screws have been removed, be sure to support the cabinet with hands.

4. After 4 screws have been removed, put the cabinet slowly on cloth (At this time, be carefully so as not to damage the front surface of the cabinet) shown in Fig.5.

- The CRT should be assembled according to the opposite sequence of its dismounting steps.

* The CRT change table should preferably be smaller that the CRT surface, and its height be about 35cm.

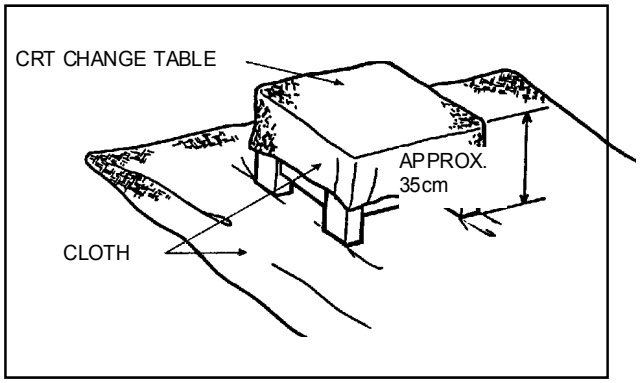

Fig. 3

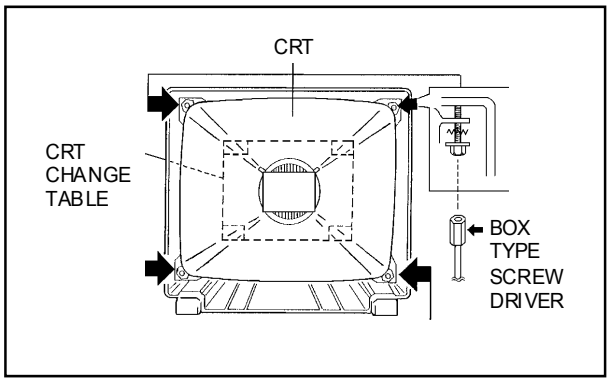

Fig. 4

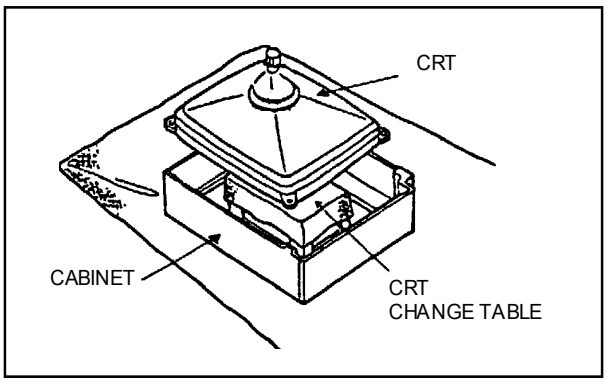

Fig. 5

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REPLACEMENT OF CHIP COMPONENT

■ CAUTIONS

1. Avoid heating for more than 3 seconds.
2. Do not rub the electrodes and the resist parts of the pattern.
3. When removing a chip part, melt the solder adequately.
4. Do not reuse a chip part after removing it.

■ SOLDERING IRON

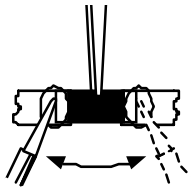
1. Use a high insulation soldering iron with a thin pointed end of it.
2. A 30w soldering iron is recommended for easily removing parts.

■ REPLACEMENT STEPS

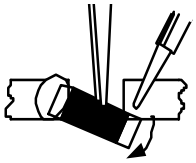
1. How to remove Chip parts

◆ **Resistors, capacitors, etc**

(1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.

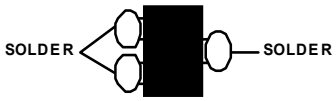


(2) Shift with tweezers and remove the chip part.

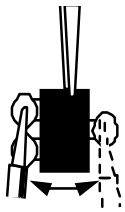


◆ **Transistors, diodes, variable resistors, etc**

(1) Apply extra solder to each lead.



(2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.

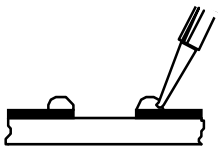


Note : After removing the part, remove remaining solder from the pattern.

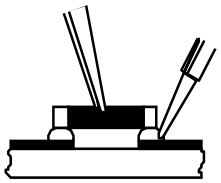
2. How to install Chip parts

◆ **Resistors, capacitors, etc**

(1) Apply solder to the pattern as indicated in the figure.

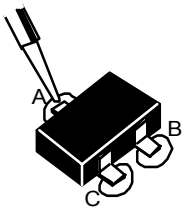


(2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.

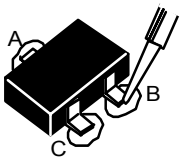


◆ **Transistors, diodes, variable resistors, etc**

(1) Apply solder to the pattern as indicated in the figure.
(2) Grasp the chip part with tweezers and place it on the solder.
(3) First solder lead **A** as indicated in the figure.



(4) Then solder leads **B** and **C**.



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REPLACEMENT OF MEMORY ICs

1. Memory ICs

This TV use memory ICs. In the memory ICs, there are memorized data for correctly operating the video and deflection circuits. When replacing memory ICs, be sure to use ICs written with the initial values of data.

2. Procedure for replacing memory ICs

PROCEDURE
(1) **Power off** Switch the power off and unplug the power cord from the outlet.
(2) **Replace ICs**. Be sure to use memory ICs written with the initial data values.
(3) **Power on** Plug the power cord into the outlet and switch the power on.
(4) **Check and set SYSTEM CONSTANT SET:** *** It must not adjust without signal.** 1) Press the INFORMATION key and the MUTING key of the REMOTE CONTROL UNIT simultaneously. 2) The SERVICE MENU screen of Fig. 1 will be displayed. 3) While the SERVICE MENU is displayed, press the INFORMATION key and MUTING key simultaneously, and the SYSTEM CONSTANT SET screen of Fig. 2 will be displayed. 4) Check the setting values of the SYSTEM CONSTANT SET of Table 1. If the value is different, select the setting item with the FUNCTION UP/DOWN key, and set the correct value with the FUNCTION -/+ key. 5) Press the MENU key to memorize the setting value. 6) Press the INFORMATION key twice, and return to the normal screen.
(5) **Setting of receive channels** Set the receive channel. For setting, refer to the OPERATING INSTRUCTIONS.
(6) **User settings** Check the user setting values of Table 2, and if setting value is different, set the correct value. For setting, refer to the OPERATING INSTRUCTIONS.
(7) **Setting of SERVICE MENU** Verify the setting items of the **SERVICE MENU** of Table 3, and reset where necessary. For setting, refer to the SERVICE ADJUSTMENTS.

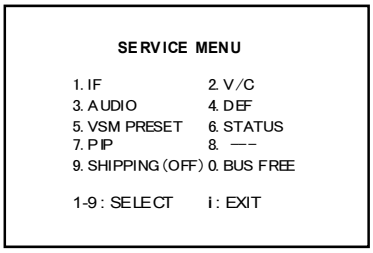

Fig.1

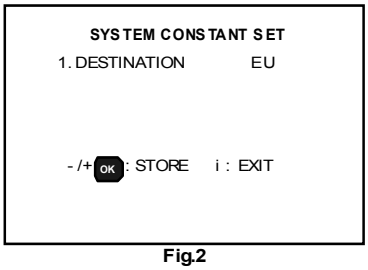

Fig.2

NAME OF REMOTE CONTROL KEY

Names of key	key
INFORMATION	
MUTING	
MENU	
FUNCTION UP/DOWN	
FUNCTION -/+	

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SETTING VALUES OF SYSTEM CONSTANT SET (TABLE 1)

Setting item	Setting content	Setting value	Setting item	Setting content	Setting value
DESTINATION	EU→EK→EI	EU	DOLBY	NO→YES	NO
CRT TYPE	16:9→4:3	16:9	BBE	NO→YES	YES
PURITY	NO→YES	NO	PROGRESSIVE	NO→YES	NO
PICTURE TILT	NO→YES	YES	TDA9178	NO→YES	NO
DIGIPURE PRO	NO→YES	NO	TONE IC	NO→YES	NO
PIP	NO→1TUNER→2TUNER	NO	FLAT	NO→YES	YES
PIC&TEXT	NO→YES	NO			

USER SETTING VALUES (TABLE 2)

PICTURE SETTING		EXT SETTING	
TINT	COOL	ID	BLANK
CONTRAST / BRIGHT SHARP / COLOUR	REFER to VSM PRESET	S-IN DUBBING	BLANK EXT-1→EXT-2
PICTURE FEATURES		**FEATURES**	
DIGITAL VNR	AUTO	SLEEP TIMER	OFF
COLOUR SYSTEM	TV : According to preset CH EXT : AUTO	BLUE BACK	ON
4:3 AUTO ASPECT	PANORAMIC		
SOUND SETTING		**INSTALL**	
BASS / TREBLE / BALANCE	CENTER	LANGUAGE	ENGLISH
HYPER SOUND BBE	OFF ON	EDIT/MANUAL	PRESET CH only The others : BLANK

SERVICE MENU SETING ITEMS (TABLE 3)

Setting item	Setting value	Setting item	Setting value
1. IF	1. VCO 2. ATT ON/OFF	4. DEF.	1. V-SHIFT 2. V-SIZE 3. H-CENT 4. H-SIZE 5. TRAPEZ 6. EW-PIN 7. COR-PIN 8. COR-UP 9. COR-LO 10. ANGLE 11. BOW 12. V-S.CR 13. V-LIN
2. V / C	1. RGB BLK 2. WDR R 3. WDR G 4. WDR B 5. BRIGHT 6. CONTRAST 7. COLOUR 8. HUE 9. SHARP 10. VCO ADJ. 11. VID AGC 12. SYC SLI 13. A MOVIE	5. VSM PRESET COOL NORMAL WARM	1. CONT. 2. BRIGHT 3. SHARP 4. COLOUR 5. HUE 6. WDR R 7. WDR G 8. WDR B
3.AUDIO **(Do not adjust)**	1. ERR LIMIT 2. A2 ID THR 3. Q-PEAK		
9.SHIPPING **(Do not adjust)**	ON/OFF	6.STATUS **(Do not adjust)**	VPS PDC

*** : Do not adjust**

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SERVICE ADJUSTMENTS

BEFORE STARTING SERVICE ADJUSTMENT

1. **There are 2 ways of adjusting this TV: One is with the REMOTE CONTROL UNIT and the other is the conventional method using adjustment parts and components.**
2. **The setting (adjustment) using the REMOTE CONTROL UNIT is made on the basis of the initial setting values. The setting values which adjust the screen to the optimum condition can be different from the initial setting values.**
3. Make sure that connection is correctly made to AC power source.
4. Turn on the power of the TV and measuring instrument for warming up for at least 30 minutes before starting adjustment.
5. If the receive or input signal is not specified, use the most appropriate signal for adjustment.
6. Never touch parts (such as variable resistors, transformers and condensers) not shown in the adjustment items of this service adjustment.
7. Preparation for adjustment (presetting):
   Unless otherwise specified in the adjustment items, preset the following functions with the REMOTE CONTROL UNIT.

- Setting position

PICTURE MODE (VSM)	NORMAL
SLEEP TIMER	OFF
TONE BALANCE	CENTER
ZOOM	FULL

MEASURING INSTRUMENT AND FIXTURES

1. DC voltmeter (or digital voltmeter)
2. Oscilloscope
3. Signal generator (Pattern generator) [PAL / SECAM / NTSC]
4. Remote control unit

ADJUSTMENT ITEMS

- Checking items.
- Adjustment of FOCUS & SCREEN
- VSM preset adjust setting.
- VIDEO / CHROMA circuit adjustment.
- DEFLECTION circuit adjustment.
- AUDIO circuit adjustment. (Do not adjust)

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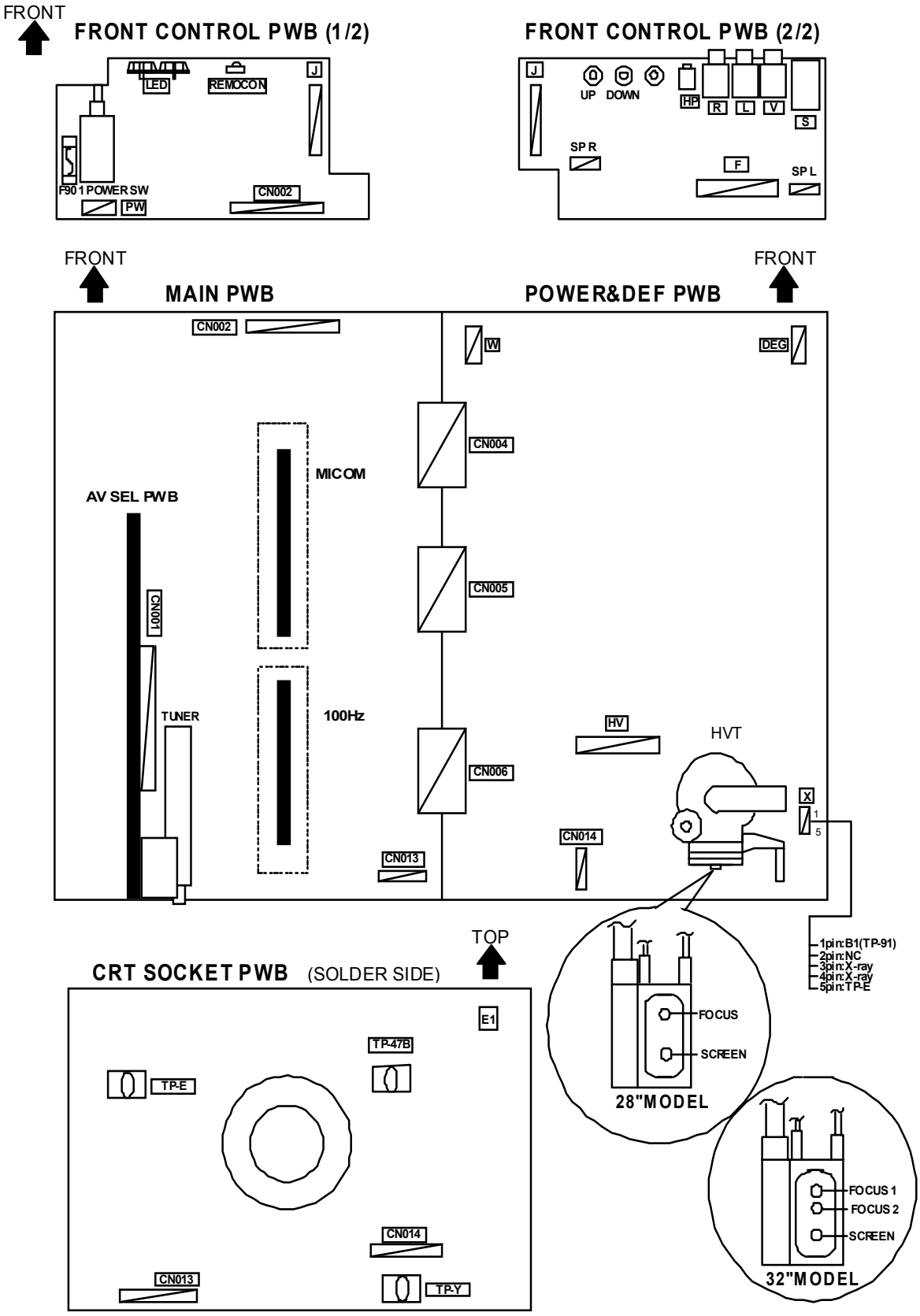
ADJUSTMENT LOCATIONS



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BASIC OPERATION SERVICE MENU

1. TOOL OF SERVICE MENU OPERATION

Operate the SERVICE MENU with the REMOTE CONTROL UNIT.

2. SERVICE MENU ITEMS

With the SERVICE MENU, various settings (adjustments) can be made, and they are broadly classified in the following items of settings (adjustments):

(1) **1. IF** ····· This mode adjusts the setting values of the IF circuit.

(2) **2.V/C** ····· This mode adjusts the setting values of the VIDEO / CHROMA circuit.

(3) **3. AUDIO** ····· This mode adjusts the setting values of the multiplicity SOUND circuit.

(4) **4. DEF** ····· This mode adjusts the setting values of the DEFLECTION circuit for each aspect mode given below.

FULL	(100/120Hzi)
PANORAMIC	(100/120Hzi)
SUBTITLE	(100/120Hzi)
COMPRESS (Fixed value)	(100/120Hzi)

(5) **5.VSM PRESET** ····· This mode adjusts the initial setting values of COOL, NORMAL and WARM.
(VSM : Video Status Memory)

3. BASIC OPERATION OF SERVICE MENU

(1) **How to enter SERVICE MENU**

Press the "**INFORMATION**" key and the "**MUTING**" key of the REMOTE CONTROL UNIT simultaneously, and the SERVICE MENU screen of Fig.1 will be displayed.

SERVICE MENU

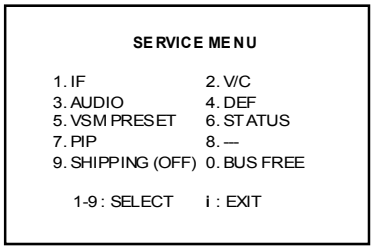

Fig.1

(2) **Selection of SUB MENU SCREEN**

Press one of keys 1～5 of the REMOTE CONTROL UNIT and select the SUB MENU SCREEN (See Fig. 3), form the SERVICE MENU.

SERVICE MENU → SUB MENU

1. IF
2. V / C
3. AUDIO
4. DEF.
5. VSM PRESET
6. STATUS
7. PIP
8. ---
9. SHIPPING (OFF)
0. BUS FREE

*** : Do not adjust**

NAME OF REMOTE CONTROL KEY

Names of key	key
INFORMATION	
MUTING	
MENU	
FUNCTION UP/DOWN	
FUNCTION -/+	

Fig.2

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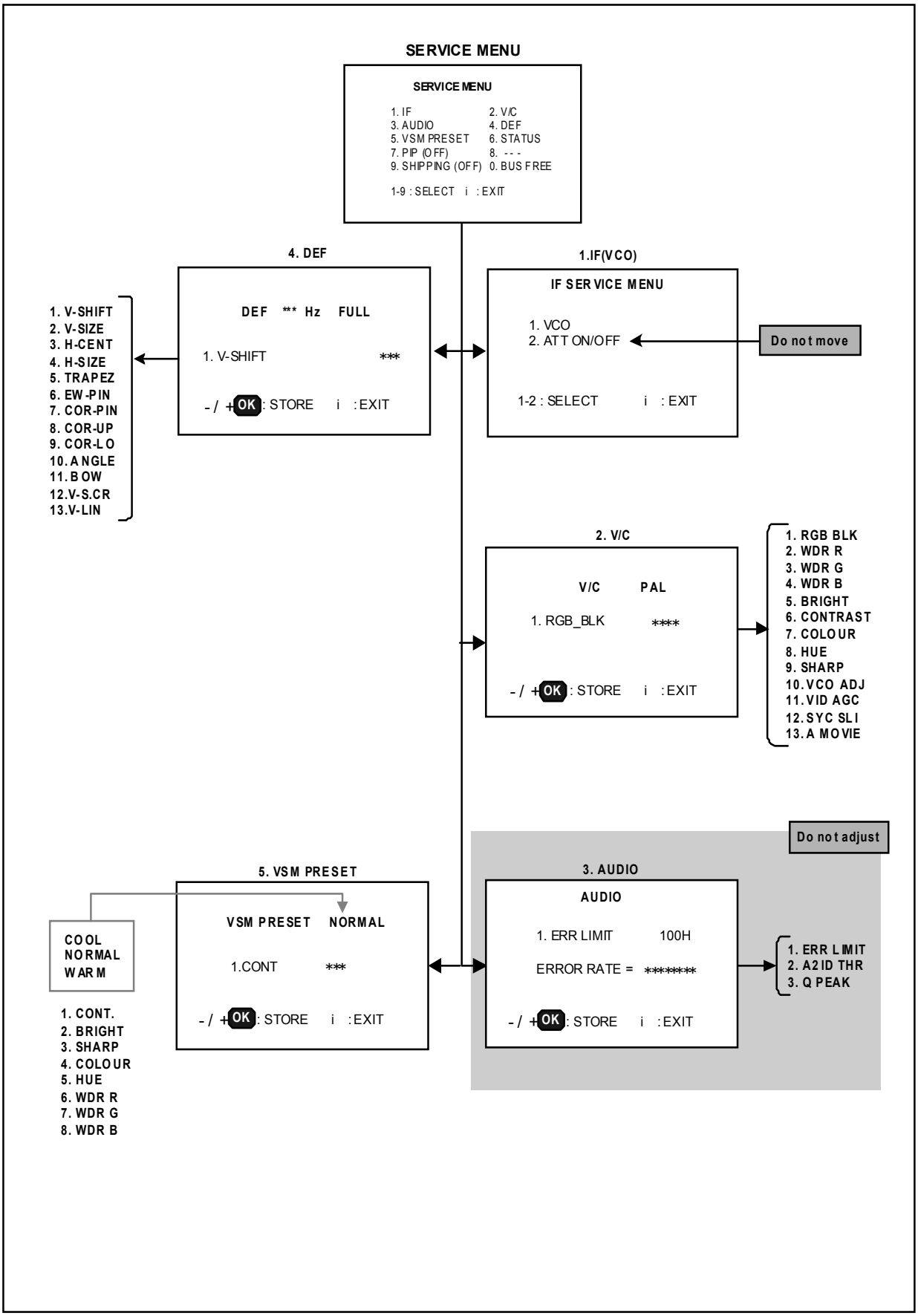

Fig.3 SUB MENU SCREEN

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(3) Method of Setting

1) Method of Setting **1.IF**

[VCO] ····· It must not adjust without signal.

① 1 Key····· Select 1.IF.

② 1 Key····· Select 1.VCO(CW)

Make sure that the arrow position between the ABOVE REF and BELOW REF.

③ INFORMATION Key····· Return to the SERVICE MENU screen.

2) Method of setting **2.V/C, 3.AUDIO, 4.DEF** and **5.VSM PRESET.**

① 2～5 Key····· Select one from **2.V/C, 3.AUDIO, 4.DEF** and **5.VSM PRESET**.

② FUNCTION UP / DOWN (▲/▼) Key ····· Select setting items.

③ FUNCTION -/+ (◀/▶) Key ····· Set (adjust) the setting values of the setting items.

④ MENU Key····· Memorize the setting value.

(Before storing the setting values in memory, do not press the CH, TV, POWER ON / OFF key - if you do, the values will not be stored in memory.)

⑤ INFORMATION Key····· Return to the **SERVICE MENU** screen.

3) Do not setting **6.STATUS, 7.PIP, 8.--- , 9.SHIPPING(OFF)** & **0.BUS FREE**.

(4) **Release of SERVICE MENU**

1) After completing the setting, return to the SERVICE MENU, then again press the INFORMATION key.

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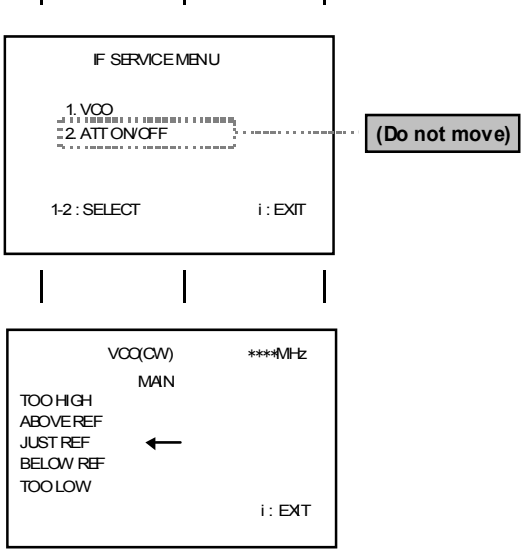
ADJUSTMENTS

CHECK ITEM

Item	Measuring instrument	Test point	Adjustment part	Description
B1 Power Supply check	**Signal generator** **DC voltmeter** **Remote control unit**	**TP-91(B1)** **TP-E(⏚)** **[X connector on POWER DEF PWB]**	**1.RGB BLK**	1. Receive a any broadcast. 2. Push the "ZOOM" key and select the FULL mode. 3. Select 2. V/C from the SERVICE MENU. 4. Select 1. RGB BLK with function UP / DOWN (▲/▼) key. 5. Press the function + (▶) key to find the cut off screen (Black screen). 6. Connect a DC voltmeter to TP-91(B1) and TP-E(⏚). 7. Make sure that the voltage is DC139.9 ±2.0V. 8. Press the function – (◀) key to return to service menu..
High Voltage check	**Signal generator** **DC volunteer** **Remote control unit**	**CRT anode** **Chassis GND**	**1.RGB BLK**	1. Receive a any broadcast. 2. Push the "ZOOM" key and select the FULL mode. 3. Select 2. V/C from the SERVICE MENU. 4. Select 1. RGB BLK with function UP / DOWN (▲/▼) key. 5. Press the function + (▶) key to find the cut off screen (Black screen). 6. Connect a DC voltmeter to CRT ANODE and chassis GND. 7. Make sure that the voltage is DC 31.0kV $^{+1kV}_{-1.5kV}$. 8. Press the function – (◀) key to return to service menu.
VCO check	**Remote control unit**		**1. VCO**	● Under normal conditions, no adjustment is required. ● Confirmation adjustment. 1. Select 1.IF from the SERVICE MENU. 2. Then select 1.VCO from the IF SERVICE MENU. 3. Receive any broadcast. 4. Check the arrow (←) position between the ABOVE REF. and BELOW REF.



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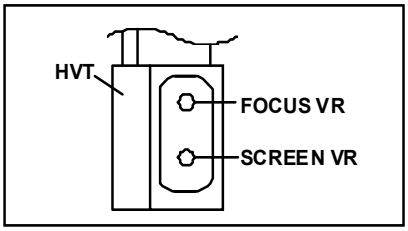
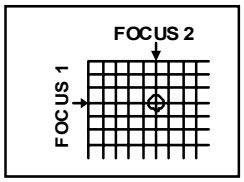
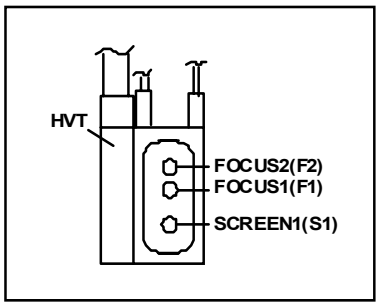
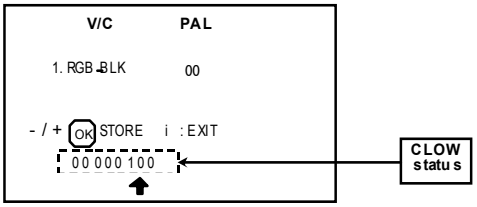
FOCUS & SCREEN ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment part	Description
FOCUS adjustment [28" MODEL]	**Signal generator**		**FOCUS VR [In HVT]**	**[28"MODEL]** 1. Receive a cross-hatch signal. 2. Press the "ZOOM" key and select the FULL mode. 3. While watching the screen, adjust the FOCUS VR to make the vertical and horizontal lines as fine and sharp as possible. 4. Make sure that when the screen is darkened, the lines remain in good focus.
FOCUS adjustment [32" MODEL]	**Signal generator**		**FOCUS 1** **FOCUS 2** **[In HVT]**	**[32"MODEL]** 1. Receive a cross-hatch signal. 2. Push the "ZOOM" key and select the FULL mode. 3. By turning the FOCUS2 VR, and adjust the picture so that the "O " part vertical line may become thinnest. 4. By turning the FOCUS1 VR, and adjust the picture so that the 3rd horizontal line from the upper may become uniform at the line center and its periphery. 5. Carry out adjustment by repeating the steps 3 and 4 above. 6. Make sure that when the screen is darkened, the lines remain in good focus.
SCREEN Adjustment	**Signal generator**		**SCREEN VR [In HVT]**	1 Press a whole black signal 2 Press the "ZOOM" key and select the FULL mode. 3 Select 2. V/C from the SERVICE MENU. 4 Turn the SCREEN VR clockwise from the full counter clockwise position and stop it at the point where "CLOW" status (marked in Fig.) changes from 1 to 0 to 1 (which is indicated at the 3rd column from the right.) 5 Then turn the SCREEN VR counterclockwise, and stop where the "CLOW" status changes 1 to 0 ∗ "CLOW" : control loopout of window.









SERVICE MODE SCREEN

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VSM PRESET ADJUST SETTING

Item	Measuring instrument	Test point	Adjustment part	Description
VSM PRESET setting	Remote control unit		1. CONT. 2. BRIGHT 3. SHARP 4. COLOUR 5. HUE 6. WDR R 7. WDR G 8. WDR B	1. Select COOL with the MENU key of the remote control unit. 2. Select 5.VSM PRESET from the SERVICE MENU. 3. Adjust the FUNCTION UP/DOWN (▲/▼) and -/+ (◄/►)key to bring the set values of 1.CONT ~ 8. WDR B to the values shown in the table. 4. Press the MENU key and memorize the set value. 5. Respectively select the VSM PRESET mode for NORMAL and WARM, and make similar adjustment as in 3 above. 6. Press the MENU key and memorize the set value. * Refer to OPERATING INSTRUCTIONS for the PICTURE MODE.

		1.CONT.	2.BRIGHT	3.SHARP	4.COLOUR	5.HUE	6.WDR R	7.WDR G	8.WDR B
32"	COOL	+16	0	-10	+1	0	-27	-12	0
	NORMAL	0	0	-10	0	0	0	0	0
	WARM	-13	0	-12	-1	0	+5	0	0
28"	COOL	+13	0	-12	0	0	-28	-12	0
	NORMAL	-3	0	-12	0	0	0	0	0
	WARM	-13	0	-12	-1	0	+4	0	0

SETTING VALUES OF VSM PRESET

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VIDEO / CHROMA CIRCUIT ADJUSTMENT

The setting (adjustment) using the REMOTE CONTROL UNIT is made on the basis of the initial setting values.
The setting values which adjust the screen to the optimum condition can be different from the initial setting values.

Setting item (Adjustment item)	Initial setting value		
2. V/C	PAL	SECAM	NTSC
1.RGB BLK	———	———	———
2.WDR R	0000	←	←
3.WDR G	0000	←	←
4.WDR B (Do not adjust)	-012	←	←
5.BRIGHT	0000	←	←
6.CONTRAST	0060	←	←
7.COLOUR	0000	←	←
8.HUE	———	———	0020
9.SHARP (Do not adjust)	0007	←	←
10.VCO ADJ. (Do not adjust)	———	———	———
11.VID AGC (Do not adjust)	0000	←	←
12.SYC SLI (Do not adjust)	0007	←	←
13.A MOVIE (Do not adjust)	0001	←	←

* : Do not adjust

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Item	Measuring instrument	Test point	Adjustment part	Description
WHITE BALANCE (High Light) adjustment	**Signal generator** **Remote control unit**		**2. WDR R** **3. WDR G** **4. WDR B** **(Do not adjust)**	● Set the PICTURE MODE to NORMAL. 1. Receive a black and white signal (colour off). 2. Select 2.V/C from the SERVICE MENU. 3. Modify 2. WDR R and 3.WDR G data to adjust the white balance (high light). 4. Press the MENU key and memorize the set value. 5. Change the contrast and brightness with the remote control up & down from low–light to high–light and check that the tracking of the white balance is good.
SUB BRIGHT adjustment	**Remote control unit**		**5. BRIGHT**	1. Receive any broadcast. 2. Select 2.V/C from the SERVICE MENU. 3. Select 5.BRIGHT with the FUNCTION UP/DOWN (▲/▼) key. 4. Set the initial setting value with the FUNCTION -/+ (◀/▶)key. 5. If the brightness is not the best with the initial setting value, make fine adjustment until you get the best brightness. 6. Press the MENU key and memorize the set value.
SUB CONT. Adjustment	**Remote control unit**		**6.CONT.**	1. Receive any broadcast. 2. Select 2.V/C from the SERVICE MENU. 3. Select 6.CONT with the FUNCTION UP/DOWN (▲/▼) key. 4. Set the initial setting value with the FUNCTION - / + (◀/▶) key. 5. If the contrast is not the best with the initial setting value, make fine adjustment until you get the best contrast. 6. Press the MENU key and memorize the set value.

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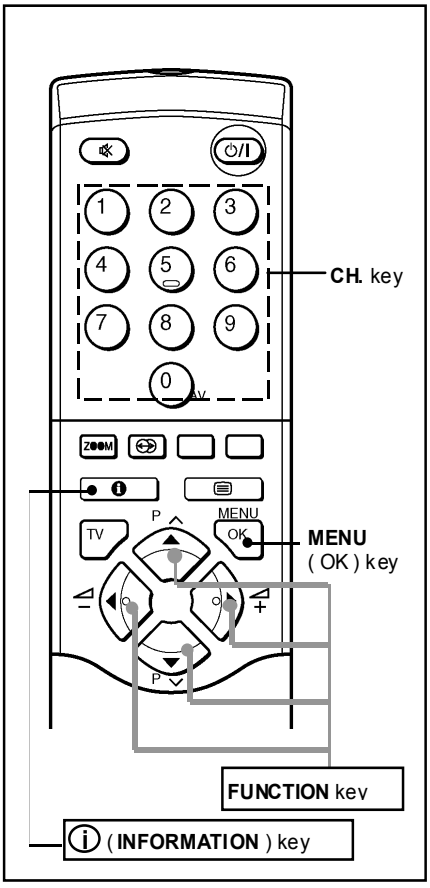
Item	Measuring instrument	Test point	Adjustment part	Description
SUB COLOUR I adjustment	**Remote control unit**		**7.COLOUR (PAL～NTSC)**	**[Method of adjustment without measuring instrument]**
			PAL COLOUR	(PAL COLOUR) 1. Receive PAL broadcast. 2. Select 2.V/C from the SERVICE MENU. 3. Select 7.COLOUR with the FUNCTION UP/DOWN (▲/▼) key. 4. Set the initial setting value for PAL COLOUR with the FUNCTION - or + (◀/▶) key. 5. If the colour is not the best with the initial set value, make fine adjustment until you get the best colour. 6. Press the MENU key and memorize the set value.
			SECAM COLOUR	(SECAM COLOUR) 1. Receive a SECAM broadcast. 2. Make fine adjustment of SECAM COLOUR in the same manner as for above.
			NTSC COLOUR	(NTSC 3.58 COLOUR) 1. Input a NTSC 3.58MHz COMPOSITE VIDEO signal from the EXT terminal. 2. Make similar fine adjustment of NTSC 3.58 COLOUR in the same manner as for above. (NTSC 4.43COLOUR) 1. When NTSC 3.58 COLOUR set, NTSC 4.43 COLOUR will automatically set.



REMOTE CONTROL KEY

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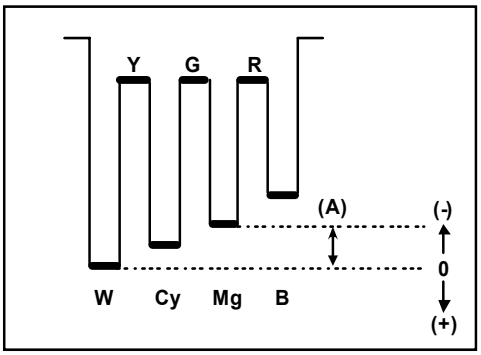
<table>
<tr><th>Item</th><th>Measuring instrument</th><th>Test point</th><th>Adjustment part</th><th>Description</th></tr>
<tr><td>SUB COLOUR Ⅱ adjustment</td><td>Signal generator

Oscilloscope

Remote control unit</td><td>TP-47B
TP-E(⏚)
[CRT SOCKET PWB]</td><td>7.COLOUR
(PAL～NTSC)</td><td>[Method of adjustment using measuring instrument]</td></tr>
<tr><td></td><td></td><td></td><td>PAL COLOUR</td><td>(PAL COLOUR)
1. Receive a PAL full field colour bar signal (75% white).
2. Select 2.V/C from the SERVICE MENU.
3. Select 7.COLOUR with the FUNCTION UP/DOWN (▲/▼) key.
4. Set the initial setting value of PAL COLOUR with the FUNCTION - or + (◀/▶) key.
5. Connect the oscilloscope between TP-47B and TP-E(⏚).
6. Adjust PAL COLOUR and bring the value of (A) in the illustration to the values as shown given billow (Voltage difference between white (W) and blue (B)).
7. Press the MENU key and memorize the setting value.
<table><tr><td>VOLTAGE (W-B)</td><td>+5V</td></tr></table></td></tr>
<tr><td></td><td></td><td></td><td>SECAM COLOUR</td><td>(SECAM COLOUR)
1. Receive a SECAM full field colour bar signal (75% white).
2. Set the initial setting value of SECAM COLOUR with the FUNCTION -/+ (◀/▶) key.
3. Adjust SECAM COLOUR and bring the value of (A) in the illustration to the values as shown given billow (Voltage difference between white (W) and blue (B)).
4. Press the MENU key and memorize the setting value.
<table><tr><td>VOLTAGE (W-B)</td><td>+4V</td></tr></table></td></tr>
<tr><td></td><td></td><td></td><td>NTSC COLOUR</td><td>(NTSC 3.58 COLOUR)
1. Input a NTSC 3.58MHz COMPOSITE VIDEO signal (full field colour bar with 75% white) from the EXT terminal.
2. Set the initial setting value of NTSC 3.58 COLOUR with the FUNCTION -/+ (◀/▶) key.
3. Adjust NTSC 3.58 COLOUR and bring the value of (A) in the illustration to the values as shown given billow (Voltage difference between white (W) and blue (B)).
4. Press the MENU key and memorize the setting value.
<table><tr><td></td><td>32”</td><td>28”</td></tr><tr><td>VOLTAGE (W-B)</td><td>+5V</td><td>+6V</td></tr></table></td></tr>
<tr><td colspan="3"> 
</td><td></td><td>(NTSC 4.43COLOUR)
1. When NTSC 3.58 COLOUR set, NTSC 4.43 COLOUR will automatically set.</td></tr>
</table>

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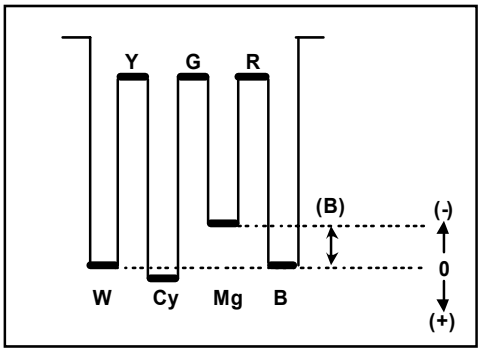
Item	Measuring instrument	Test point	Adjustment part	Description
SUB HUE Ⅰ adjustment	**Remote control unit**		**8. HUE**	**[Method of adjustment without measuring instrument]**
			NTSC 3.58 HUE	[NTSC 3.58 HUE] 1. Input a NTSC 3.58MHz COMPOSITE VIDEO signal (full field colour bar with 75% white) from the EXT terminal. 2. Select 2.V/C from the SERVICE MENU. 3. Select 8. HUE with the FUNCTION UP/DOWN (▲/▼) key. 4. Set the initial setting value of NTSC 3.58 HUE with the FUNCTION -/+ (◄/►) key. 5. If you cannot get the best hue with the initial setting value, make fine adjustment until you get the best hue. 6. Press the MENU key and memorize the set value.
			NTSC 4.43 HUE	(NTSC 4.43 HUE) 1. When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values
Adjustment of SUB HUE Ⅱ	**Signal generator** **Oscilloscope** **Remote control unit**	**TP-47B TP-E(⏚) [CRT SOCKET PWB]**	**8. HUE**	**[Method of adjustment using measuring instrument]**
			NTSC 3.58 HUE	[NTSC 3.58 HUE] 1. Input a NTSC 3.58MHz COMPOSITE VIDEO signal (full field colour bar with 75% white) from the EXT terminal. 2. Select 2.V/C from the SERVICE MENU. 3. Select 8. HUE with the FUNCTION UP/DOWN (▲/▼) key. 4. Set the initial setting value of NTSC 3.58 HUE with the FUNCTION - or + (◄/►) key. 5. Connect the oscilloscope between TP-47B and TP-E(⏚) 6. Adjust NTSC 3.58 HUE to bring the value of **(B)** in the illustration to the values as shown given billow (voltage difference between white (W) and magenta (Mg)). 7. Press the MENU key and memorize the setting value
			NTSC 4.43 HUE	(NTSC 4.43 HUE) 1. When NTSC 3.58 COLOUR set, NTSC 4.43 COLOUR will automatically set.



	32”	28”
VOLTAGE (W-Mg)	-8V	-3V

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DEFLECTION CIRCUIT ADJUSTMENT

There are 4 aspect modes (①FULL, ②PANORAMIC, ③SUBTITLE, ④COMPRES) of the adjustment (1) 100Hz i mode, (2) 120Hz i mode ····· depending upon the kind of signals (vertical frequency 100Hzi / 120Hzi).

- **When the 100Hz FULL mode has been established, the setting of other modes will be done automatically. However, if the picture quality has not been optimized, adjust each mode again, respectively.**
- **The adjustment using the remote control unit is made on the basis of the initial setting values.**
- **The setting values which adjust the screen to the optimum condition can be different from the initial setting values.**

Initial setting value (AV32H20EUS) *** : Fixed value**

Setting item	Adjustment name	Initial setting value							
		FULL		PANORAMIC		SUBTITLE		COMPRESS	
		100Hzi	120Hzi	100Hzi	120Hzi	100Hzi	120Hzi	100Hzi	60P
1. V-SHIFT	Vertical center	-001	+001	0000	0000	+012	0000	0000	0000
2. V-SIZE	Vertical height	+002	-001	+002	0000	+008	0000	-014	0000
3. H-CENT	Horizontal center	-005	+004	-002	0000	0000	0000	0000	0000
4. H-SIZE	Horizontal width	0000	-004	-003	0000	0000	0000	0000	0000
5. TRAPEZ	Trapezoidal distortion correction	-013	-002	-003	0000	-002	0000	0000	0000
6. EW-PIN	Side pin correction	-041	0000	0000	0000	0000	0000	0000	0000
7. COR-PIN	Corner Pin	0000	0000	0000	0000	0000	0000	0000	0000
8. COR-UP	Corner Pin correction Up side	0000	0000	0000	0000	0000	0000	0000	0000
9. COR-LO	Corner Pin correction Low side	0000	0000	0000	0000	0000	0000	0000	0000
10.ANGLE	Angle correction	0000	0000	0000	0000	0000	0000	0000	0000
11.BOW	Bow-shaped distortion correction	0000	0000	0000	0000	0000	0000	0000	0000
12.V-S.CR **(Do not adjust)**	Vertical height correction	0000	0000	0000	0000	+012	0000	0000	0000
13.V-LIN **(Do not adjust)**	Vertical Linearity	-007	0000	0000	0000	-017	0000	0000	0000

Initial setting value (AV28H20EUS, AV28H20EUB)

Setting item	Adjustment name	Initial setting value							
		FULL		PANORAMIC		SUBTITLE		COMPRESS	
		100Hzi	120Hzi	100Hzi	120Hzi	100Hzi	120Hzi	100Hzi	60P
1. V-SHIFT	Vertical center	-002	+002	0000	0000	+011	0000	0000	0000
2. V-SIZE	Vertical height	+006	0000	+003	0000	+009	0000	-015	0000
3. H-CENT	Horizontal center	-013	+004	-003	0000	+001	0000	0000	0000
4. H-SIZE	Horizontal width	-002	-004	-004	0000	0000	0000	0000	0000
5. TRAPEZ	Trapezoidal distortion correction	-023	0000	-003	0000	0000	0000	0000	0000
6. EW-PIN	Side pin correction	-042	0000	0000	0000	0000	0000	0000	0000
7. COR-PIN	Corner Pin	0000	0000	0000	0000	0000	0000	0000	0000
8. COR-UP	Corner Pin correction Up side	0000	0000	0000	0000	0000	0000	0000	0000
9. COR-LO	Corner Pin correction Low side	0000	0000	0000	0000	0000	0000	0000	0000
10.ANGLE	Angle correction	0000	0000	0000	0000	0000	0000	0000	0000
11.BOW	Bow-shaped distortion correction	0000	0000	0000	0000	0000	0000	0000	0000
12.V-S.CR **(Do not adjust)**	Vertical height correction	+002	0000	0000	0000	+010	0000	0000	0000
13.V-LIN **(Do not adjust)**	Vertical Linearity	-005	0000	0000	0000	-015	0000	0000	0000

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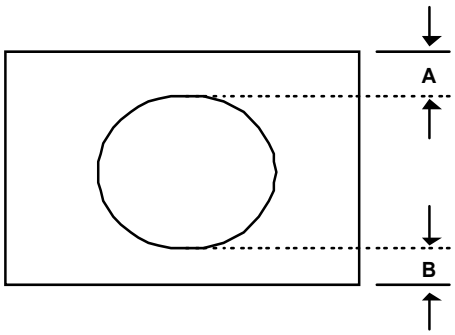
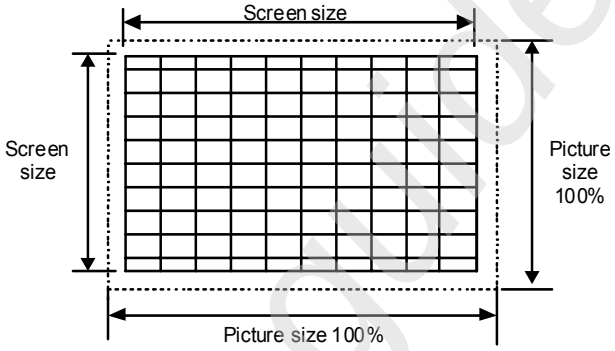
Item	Measuring instrument	Test point	Adjustment part	Description
V-SHIFT Adjustment	**Signal generator** **Remote control unit**		**1.V- SHIFT**	[FULL mode] 1. Receive a circle pattern signal of vertical frequency 50Hz. 2. Select 4.DEF from the SERVICE MENU. 3. Select 1.V-SHIFT with the FUNCTION UP / DOWN (▲/▼) key. 4. Adjust V-SHIFT to make **A = B**. 5. Check the adjustment value above in other zoom mode. If it is a wrong adjustment, re-adjust in PANORAMIC mode and adjust by 1.V-SHIFT. 6. Press the MENU key and memorize the set value.
V-SIZE adjustment			**2.V-SIZE**	1. Receive a cross-hatch signal. 2. Select 2.V-SIZE and set the initial setting value. 3. Adjust V-SIZE and make sure that the vertical screen size of the picture size is in the bellow table. 4. Press the MENU key and memorize the set value. 5. Input a NTSC VIDEO signal (60Hz) from the EXT terminal, and make sure that the vertical screen size is in the table below. 6. Press the MENU key and memorize the set value





ASPECT MODE	FULL	PANORAMIC	SUBTITLE
SCREEN TOP	92%	87%	70%
SCREEN BOTTOM	92%	87%	83%

[SCREEN SIZE]

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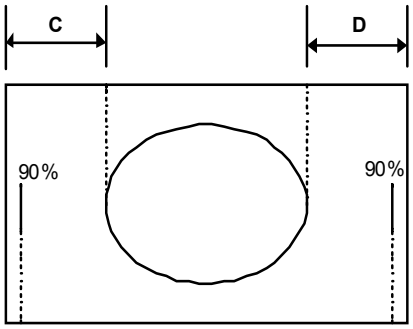
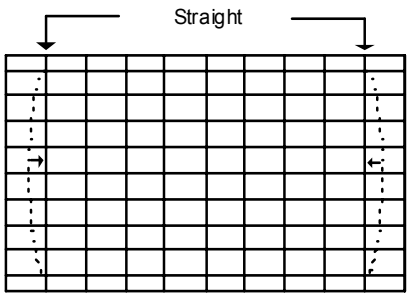
<table>
<tr><th>Item</th><th>Measuring instrument</th><th>Test point</th><th>Adjustment part</th><th>Description</th></tr>
<tr><td>H. CENTER adjustment
 
</td><td></td><td></td><td>3.H-CENT.</td><td>1. Receive a circle pattern signal.
2. Select 3.H-CENT and set the initial setting value.
3. Adjust H-CENT to make C=D.
4. Press the MENU key and memorize the set value.</td></tr>
<tr><td>H.SIZE adjustment</td><td></td><td></td><td>4.H-SIZE</td><td>1. Receive a circle pattern signal.
2. Select 4.H-SIZE and set the initial setting value.
3. Adjust H-SIZE and make sure that the horizontal screen size of the picture size is in the bellow table.
4. Press the MENU key and memorize the set value.
5. Input a NTSC VIDEO signal (60Hz) from the EXT terminal, and make sure that the horizontal screen size of the each ASPECT mode is in the below table.
6. Press the MENU key and memorize the set value.</td></tr>
<tr><td colspan="5">
<table>
<tr><th>ASPECT MODE</th><th>FULL</th><th>PANORAMIC</th><th>SUBTITLE</th></tr>
<tr><td>H SIZE</td><td>92%</td><td>95%</td><td>92%</td></tr>
</table>
[SCREEN SIZE]
</td></tr>
<tr><td>EW-PIN adjustment
 
</td><td></td><td></td><td>6.EW-PIN</td><td>1. Select 6.EW-PIN and set the initial setting value
2. Adjust EW-PIN and make the 2nd.vertical lines at the left and right edges of the screen straight. Also make sure that the 3rd vertical lines are straight.
3. Press the MENU key and memorize the set value.</td></tr>
</table>

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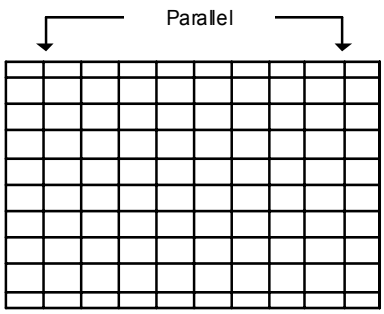
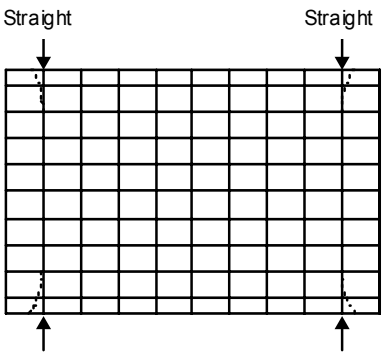
Item	Measuring instrument	Test point	Adjustment part	Description
TRAPEZIUM adjustment	**Signal generator** **Remote control unit**		**5.TRAPEZ**	1. Receive a cross-hatch signal. 2. Select 5.TRAPEZ with the FUNCTION UP/DOWN (▲/▼) key. 3. Set the initial setting value of TRAPEZ with the FUNCTION - or + (◄/►) key. 4. Adjust TRAPEZ and bring the VERTICAL lines at the right and left edges of the screen parallel . 5. Press the MENU key and memorize the set value.
COR. UP/LO adjustment	**Signal generator** **Remote control unit**		**7.COR-PIN** **8.COR-UP** **9.COR-LO**	1. Select 8.COR-UP with the FUNCTION UP / DOWN (▲/▼) key. 2. Set the initial setting value of COR.-UP with the FUNCTION - or + (◄/►) key. 3. Adjust COR-UP, and bring the straight line at the upper corner. 4. Select 9.COR-LO with the FUNCTION UP / DOWN (▲/▼) key. 5. Set the initial setting value of COR-LO with the FUNCTION - or + (◄/►) key. 6. Adjust COR-LO, and bring the straight line at the low corner. 7. Press the MENU key and memorize the set value. 8. If the extreame upper & lower corners are a little pin or barrel chose 7.COR-PIN and adjust. 9. Press the MENU key and memorize the set value
ANGLE adjustment			**10. ANGLE**	• **In case where there is a parallelogrammical distortion of images on the screen. (Fig.A)** 1. Select 10.ANGLE with the FUNCTION UP / DOWN (▲/▼) key. 2. Adjust ANGEL, and bring the VERTICAL lines straight.. 3. Press the MENU key and memorize the set value.





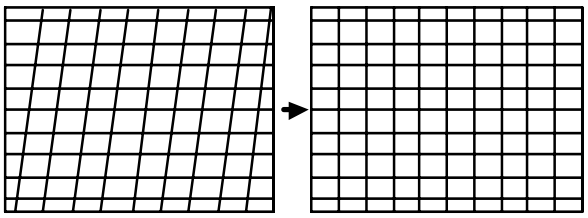


Fig. A

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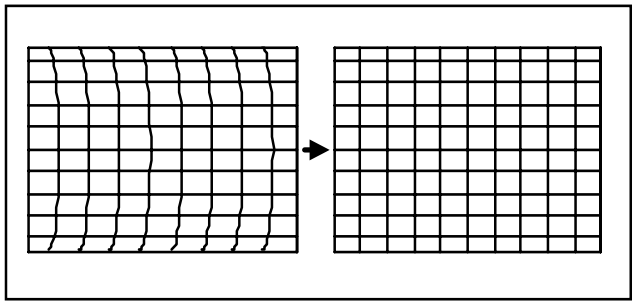
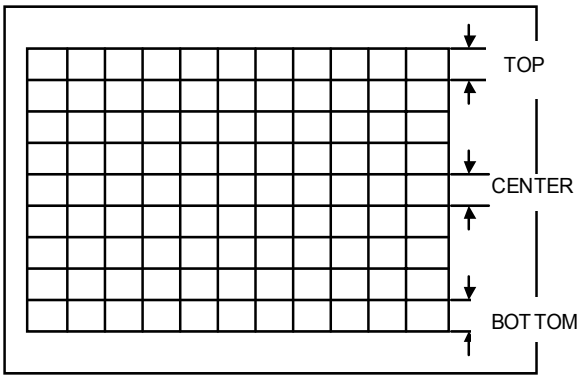
Item	Measuring instrument	Test point	Adjustment part	Description
BOW adjustment			**11.BOW**	• **In case where there is a bow-shaped distortion of images on the screen. (Fig.B)** 1. Select 11.BOW with the FUNCTION UP/DOWN (▲/▼) key. 2. Adjust BOW, and bring the VERTICAL lines straight. 3. Press the MENU key and memorize the set value.
 **Fig. B**				
V-S.CR & V.LINEARITY adjustment			**12.V-S.CR** **13.V-LIN**	• **When the vertical linearity has been deteriorated remarkably, perform the following steps.** 1. Receive a cross-hatch signal. 2. Select 13.V-LIN with the FUNCTION UP/DOWN (▲/▼)key. 3. Set the initial setting value of 13.V-LIN with the FUNCTION - / + (◄/►) key. 4. Select 12.V-S.COR with the FUNCTION UP / DOWN (▲/▼) key. 5. Set the initial setting value of 12.V-S.COR with the FUNCTION - / + (◄/►) key. 6. Adjust 13.V-LIN and 12.V-S.COR so that the spaces of each line on TOP, CENTER and BOTTOM become uniform. ***NOTE :*** *Do not adjust PANORAMIC & SUBTITLE mode.*
				
				At first the adjustment in 100Hz FULL mode should be done, then the data for the other aspect mode is corrected in the respective value at the same time. And confirm the deflection adjustment initial setting value in 120Hz (NTSC EXT mode) FULL mode. If the adjustment in 100Hz each aspect mode has been done and stored, the data for the same aspect modes in 120Hz is corrected in the respective value. Only the data for the other aspect mode in 120Hz is corrected for itself.

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AV32H20EUS
AV28H20EUS
AV28H20EUB

AUDIO CIRCUIT ADJUSTMENT

- Do not touch **3. AUDIO** adjustment of the SERVICE MENU as it requires no adjustment.
  If values had changed for the some reason, set the initial values in the following table.

3. AUDIO (Do not adjust)

Setting item	Variable range	fixed value
1. ERR LIMIT	000H～FF0H	100H
2. A2 ID THR	00H～FFH	19H
3. Q-PEAK	0000H～7FFFH	--

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AV32H20EUS
AV28H20EUS
AV28H20EUB

JVC

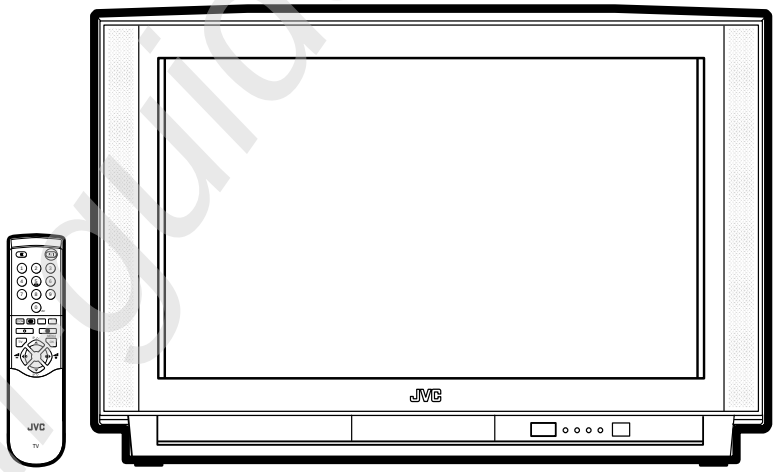
SCHEMATIC DIAGRAMS

COLOUR TELEVISION

BASIC CHASSIS
MF II

AV32H20EUS
AV28H20EUS
AV28H20EUB

CD-ROM No.SML200205



InteriArt
Natural Vision
T-V LINK

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- SEMICONDUCTOR SHAPES ---------- 2-2
- BLOCK DIAGRAM ---------- 2-3
- CIRCUIT DIAGRAMS ---------- 2-5
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No.51945
May 2002

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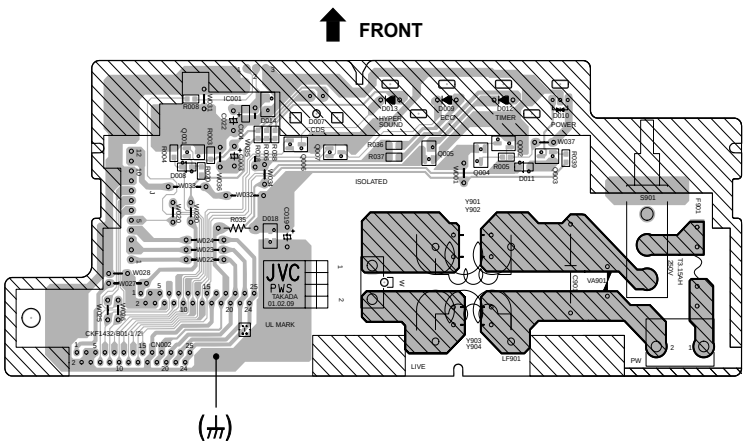
***FRONT CONTROL PWB PATTERN* [2/2]**



AV32H20EUS / AV28H20EUS / AV28H20EUB STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1.SAFETY

The components identified by the ⚠symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

(1)Input signal	: Colour bar signal	
(2)Setting positions of each knob/button and variable resistor	: Original setting position when shipped	
(3)Internal resistance of tester	:DC 20kΩ /V	
(4)Oscilloscope sweeping time	:H	⇒ 20μS/div
	:V	⇒ 5mS/div
	:Others	⇒ Sweeping time is specified
(5)Voltage values	:All DC voltage values	

∗ Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATION OF PARTS SYMBOL [EXAMPLE]

● In the PW board :R1209 → R209

4.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

● Resistance value

No unit	:[Ω]
K	:[K Ω]
M	:[M Ω]

● Rated allowable power

No indication	:1/ 16 [W]
Others	:As specified

● Type

No indication	:Carbon resistor
OMR	:Oxide metal film resistor
MFR	:Metal film resistor
MPR	:Metal plate resistor
UNFR	:Uninflammable resistor
FR	:Fusible resistor

∗ Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

● Capacitance value

1 or higher	:[pF]
less than 1	:[μF]

● Withstand voltage

No indication	:DC50[V]
Others	:DC withstand voltage [V]
AC indicated	:AC withstand voltage [V]

∗ Electrolytic Capacitors
47/50[Example]:Capacitance value [μF]/withstand voltage[V]

● Type

No indication	:Ceramic capacitor
MM	:Metalized mylar capacitor
PP	:Polypropylene capacitor
MPP	:Metalized polypropylene capacitor
MF	:Metalized film capacitor
TF	:Thin film capacitor
BP	:Bipolar electrolytic capacitor
TAN	:Tantalum capacitor

(3)Coils

No unit	:[μH]
Others	:As specified

(4)Power Supply

:B1 :B2 (12V)
:9V :5V

∗ Respective voltage values are indicated

(5)Test point

:Test point :Only test point display

(6)Connecting method

:Connector :Wrapping or soldering
:Receptacle

(7)Ground symbol

:LIVE side ground
:ISOLATED(NEUTRAL) side ground
:EARTH ground
:DIGITAL ground

5.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND and the ISOLATED(NEUTRAL) : (⏚) side GND.Therefore, care must be taken for the following points.

(1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.

(2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected , a fuse or any parts will be bro

◇ **Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.**

NOTE

◇ **Due improvement in performance, some part numbers show in the circuit diagram may not agree with those indicated in the part list.**
When ordering parts, please use the numbers that appear in the Parts List.

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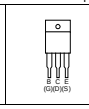
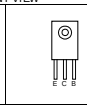
SEMICONDUCTOR SHAPES

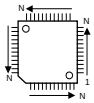
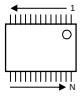
TRANSISTOR

BOTTOM VIEW	FRONT VIEW				TOP VIEW
					

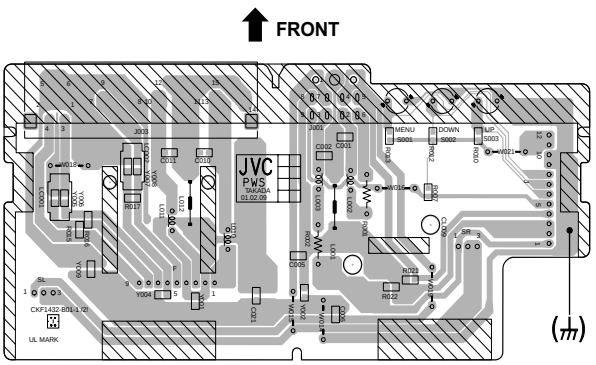
IC

BOTTOM VIEW	FRONT VIEW			TOP VIEW

CHIP IC

TOP VIEW		
		

***FRONT CONTROL PWB PATTERN* [1/2]**



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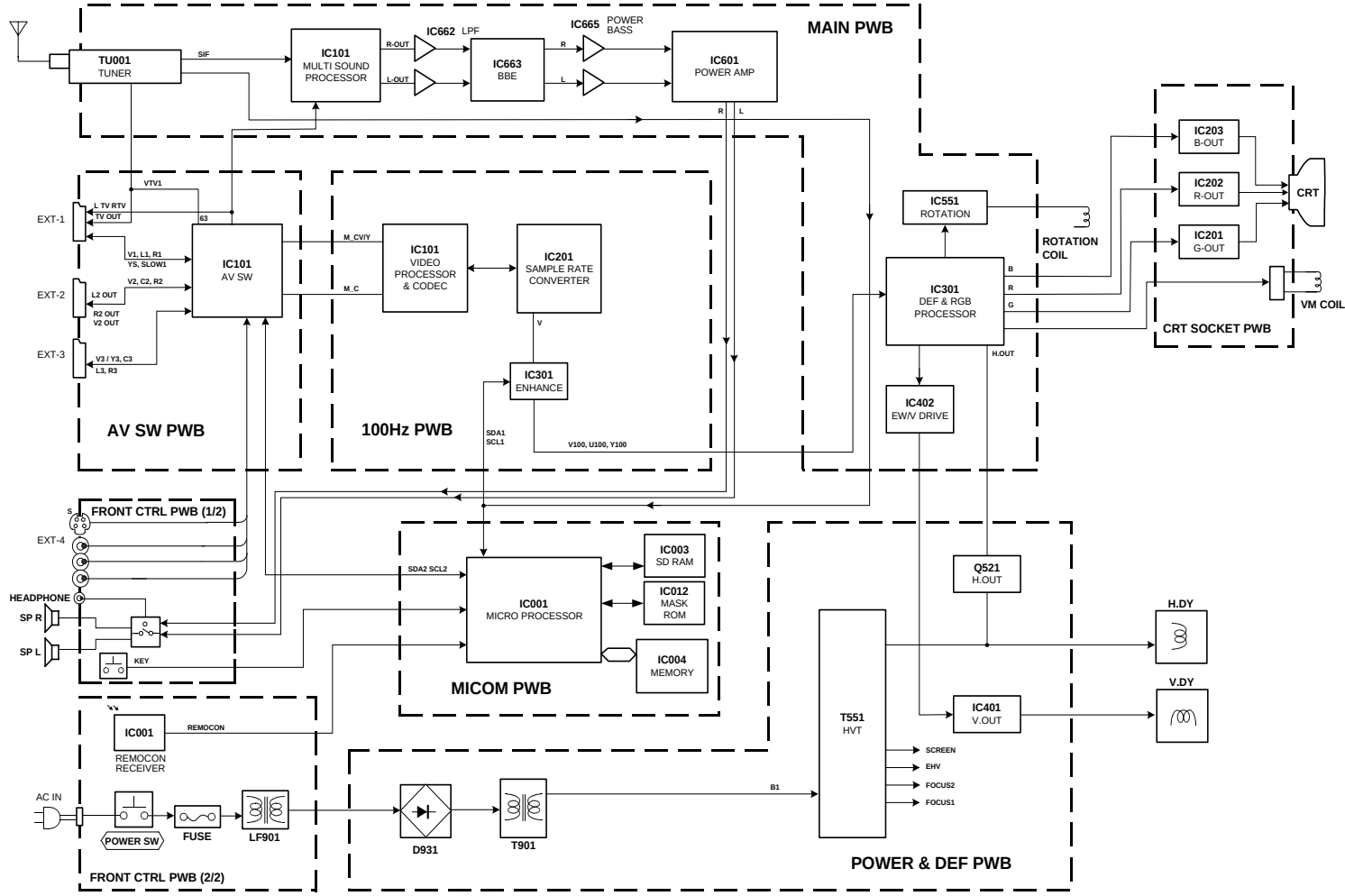
AV32H20EUS
AV28H20EUS
AV28H20EUB

AV32H20EUS
AV28H20EUS
AV28H20EUB

BLOCK DIAGRAM



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CIRCUIT DIAGRAMS *MAIN PWB CIRCUIT DIAGRAM* [1/2]

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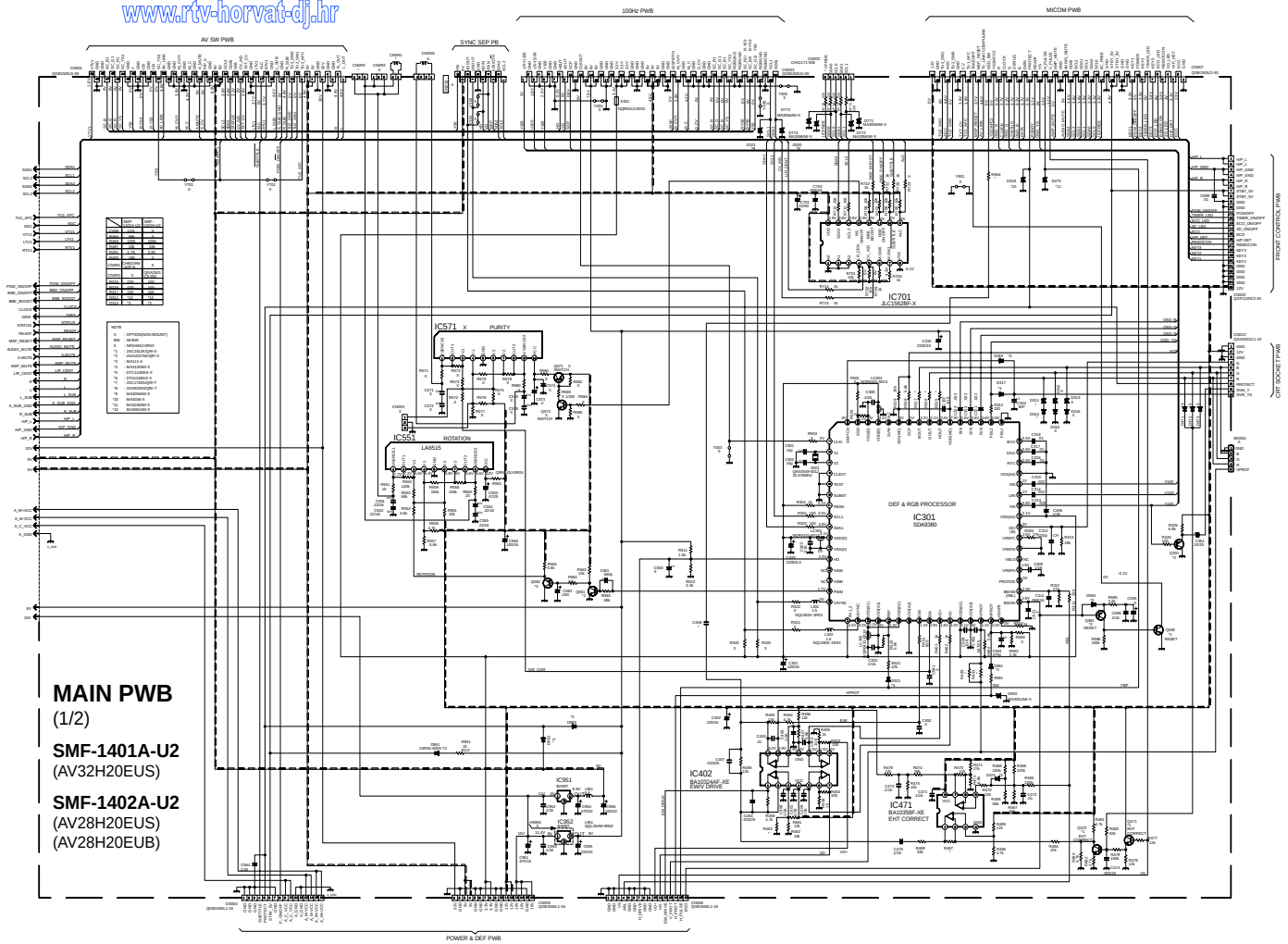

MAIN PWB
(1/2)

SMF-1401A-U2
(AV32H20EUS)

SMF-1402A-U2
(AV28H20EUS)
(AV28H20EUB)

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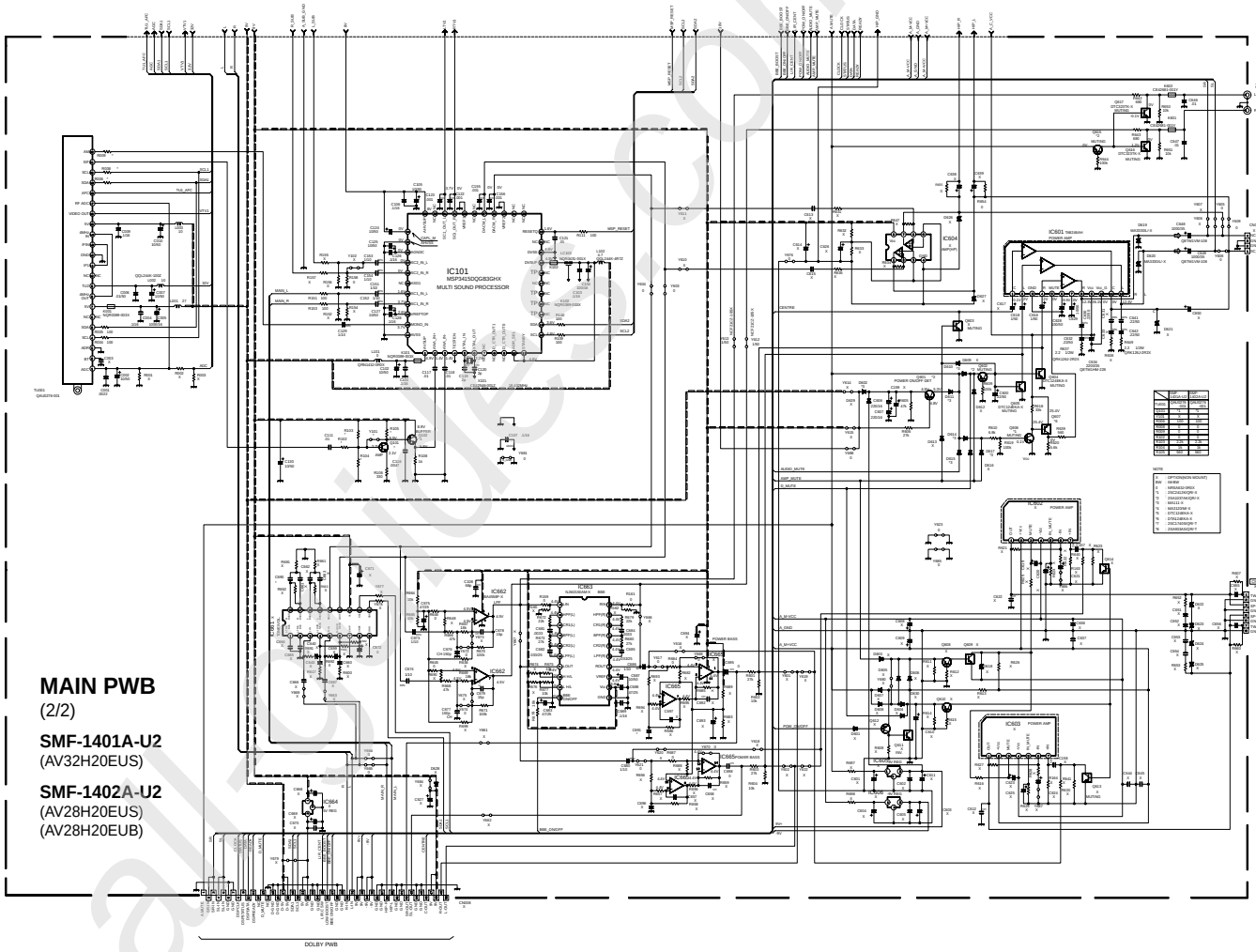
AV28H20EUS
AV28H20EUB

AV32H20EUS
AV28H20EUS
AV28H20EUB

***MAIN PWB CIRCUIT DIAGRAM* [2/2]**



MAIN PWB
(2/2)

SMF-1401A-U2
(AV32H20EUS)

SMF-1402A-U2
(AV28H20EUS)
(AV28H20EUB)

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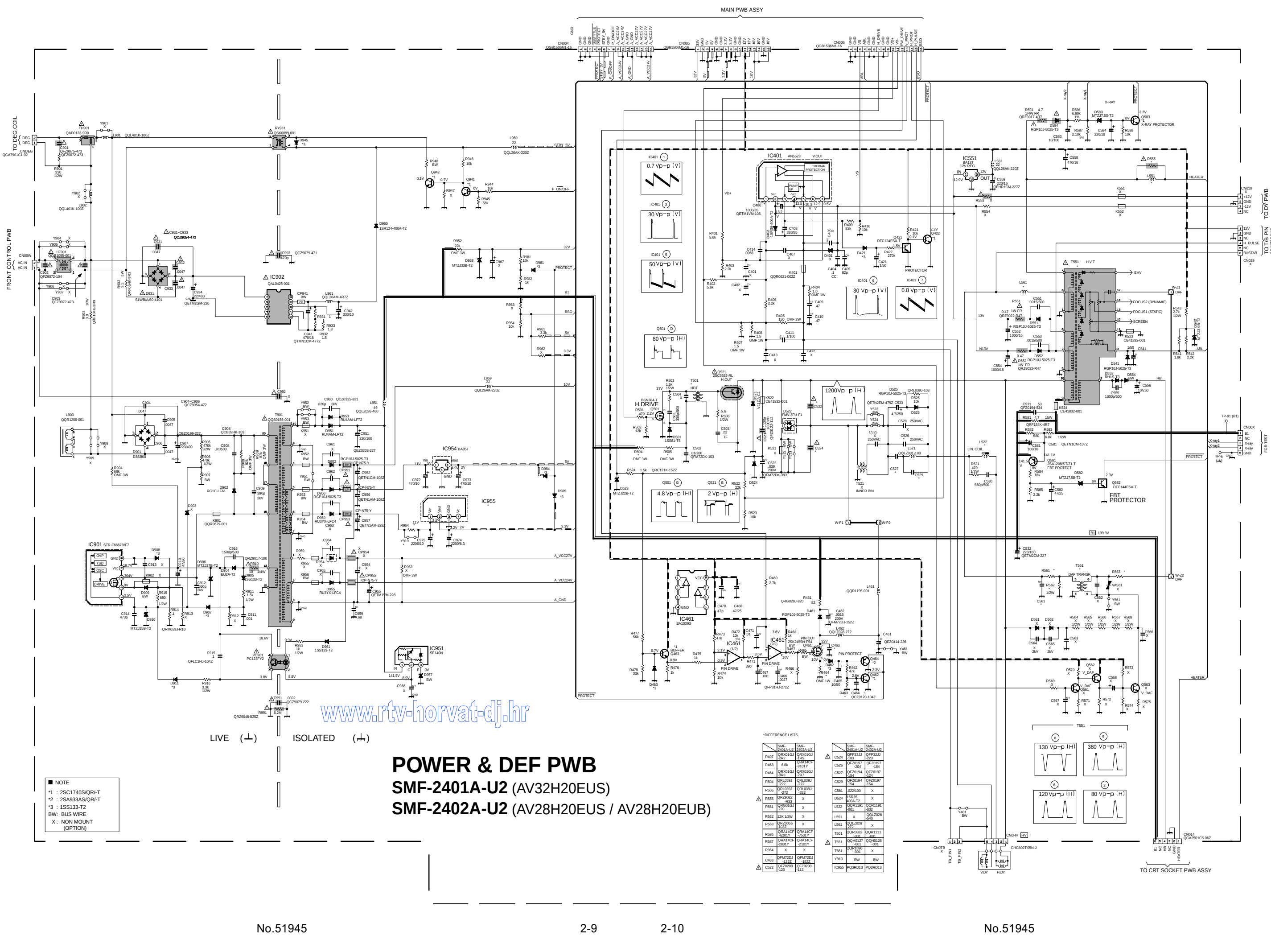
AV28H20EUS
AV28H20EUB

AV32H20EUS
AV28H20EUS
AV28H20EUB

POWER & DEF PWB CIRCUIT DIAGRAM



POWER & DEF PWB

SMF-2401A-U2 (AV32H20EUS)

SMF-2402A-U2 (AV28H20EUS / AV28H20EUB)

■ NOTE

- *1 : 2SC1740S/QR/-T
- *2 : 2SA933AS/QR/-T
- *3 : 1SS133-T2
- BW: BUS WIRE
- X : NON MOUNT (OPTION)

*DIFFERENCE LISTS

	SMF-2401A-U2	SMF-2402A-U2
R407	QRX01GJ-2R2	QRX01GJ-1R5
R463	6.8k	QRA14CF-9101Y
R464	QRX01GJ-3R3	QRX01GJ-2R7
R504	QRL039J-222	QRL039J-272
R505	QRL039J-272	QRL039J-332
⚠ R555	QRZ9022-R33	X
R561	QRG01GJ-220	X
R562	12K 1/2W	X
R563	QRZ0056-103Z	X
R586	QRA14CF-6201Y	QRA14CF-7501Y
R587	QRA14CF-2801Y	QRA14CF-2101Y
R964	X	X
C463	QFM72DJ-122Z	QFM72DJ-152Z
⚠ C522	QFZ0200-123	QFZ0200-113

	SMF-2401A-U2	SMF-2402A-U2
⚠ C524	QFP32JJ-183	QFP32JJ-223
C526	QFZ0197-204	QFZ0197-184
C527	QFZ0194-154	QFZ0197-124
C529	QFZ0194-154	QFZ0197-154
C561	.022/100	X
D524	1SR35-400A-T2	X
L522	QQR1191-001	QQR1191-002
L551	X	QQLZ026-540
L561	QQLZ028-272	X
T501	QQR0882-001	QQR1111-001
⚠ T551	QQH0127-001	QQH0126-001
T561	QQR1096-001	X
Y910	BW	BW
IC955	PQ3RD13	PQ3RD13

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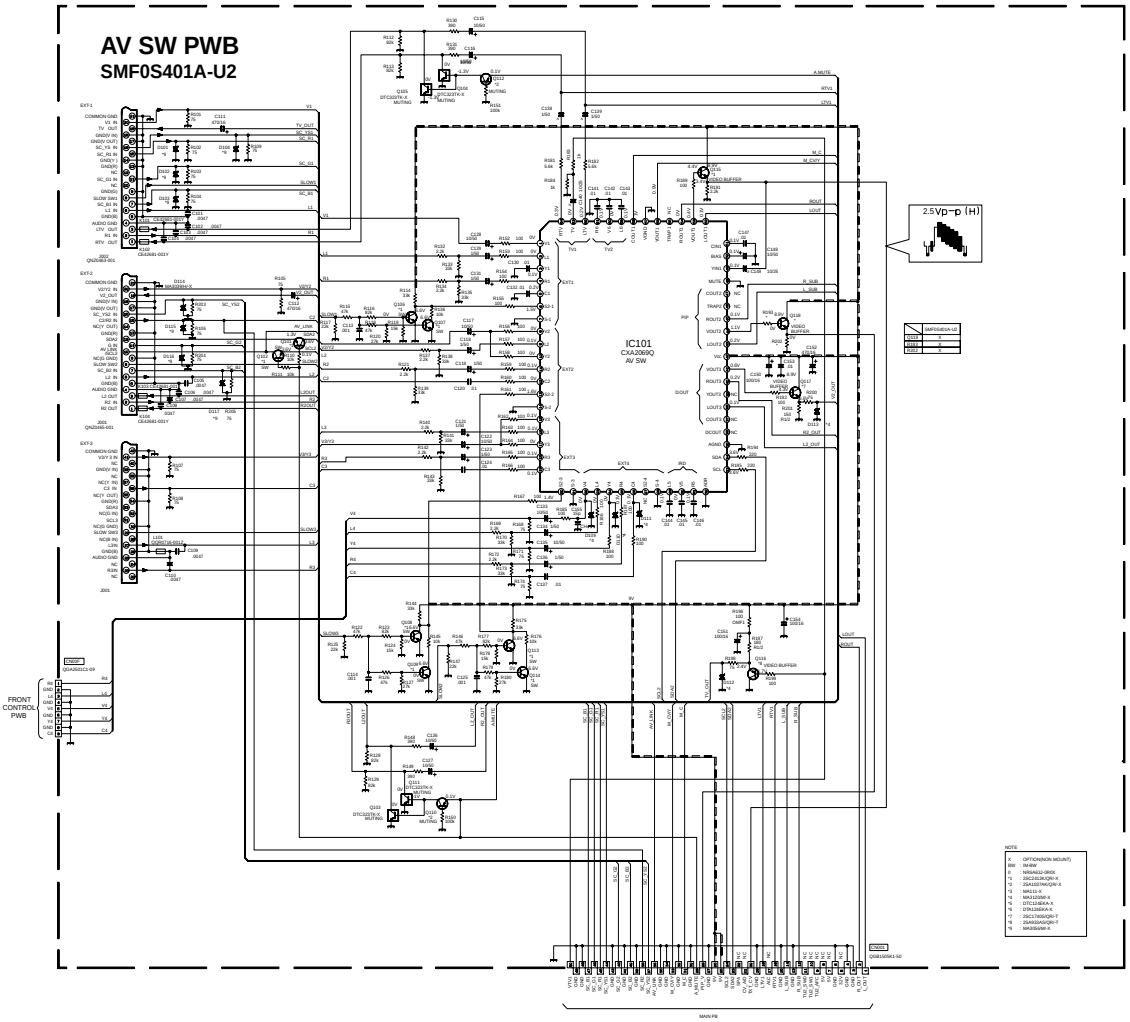
AV28H20EUB

AV SW PWB CIRCUIT DIAGRAM



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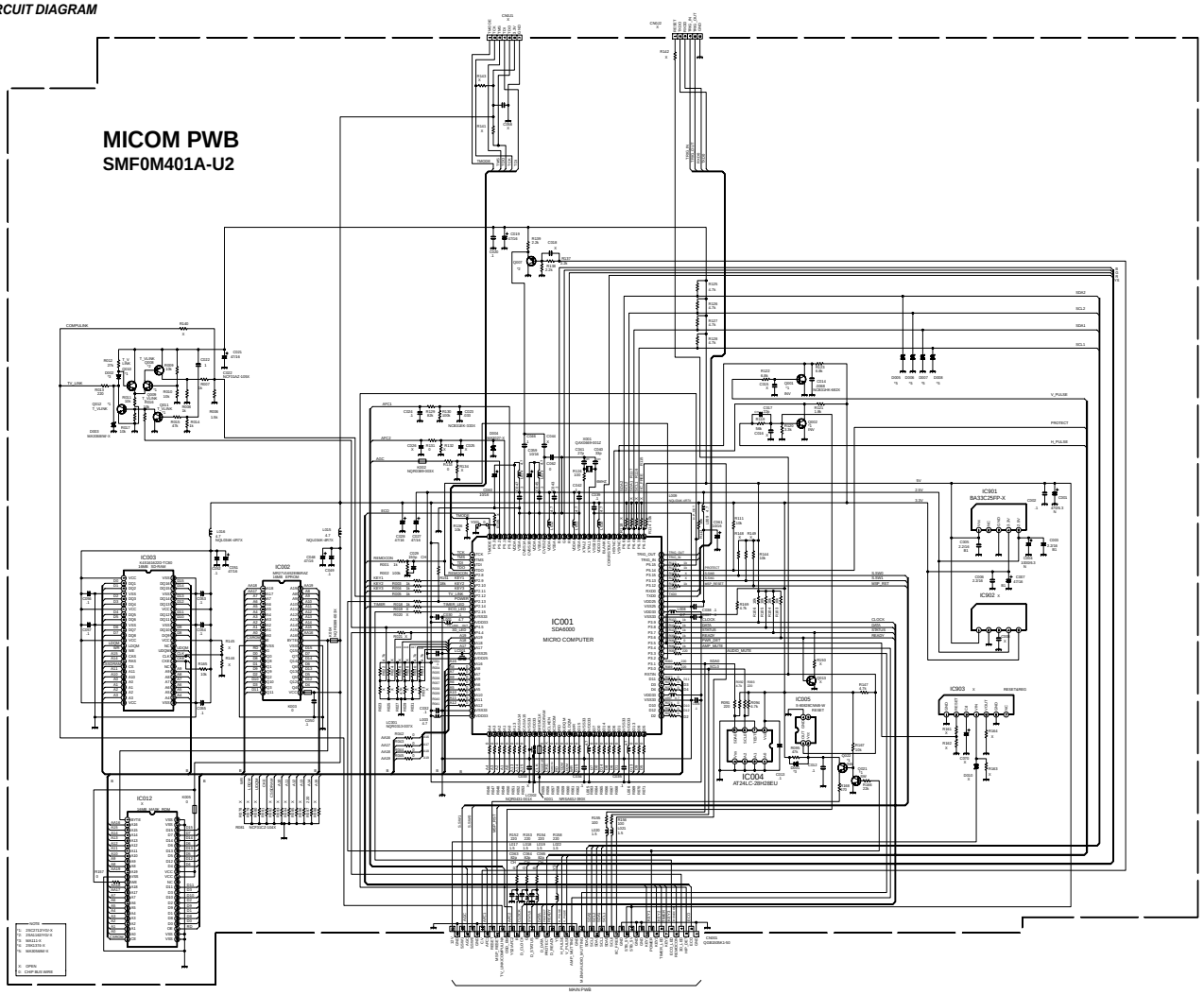
MICOM PWB CIRCUIT DIAGRAM

MICOM PWB
SMF0M401A-U2



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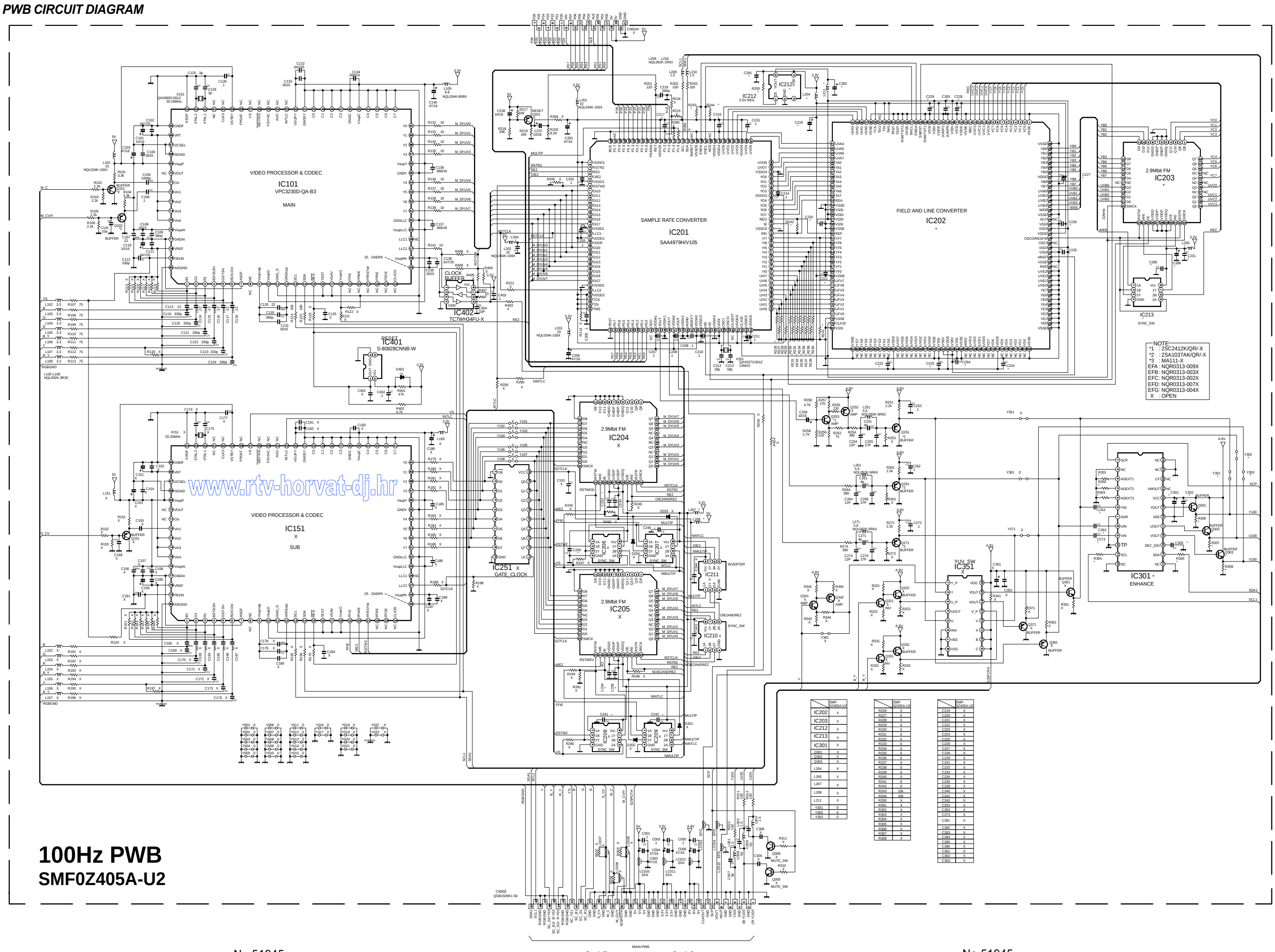
AV28H20EUS
AV28H20EUB

AV32H20EUS
AV28H20EUS
AV28H20EUB

100Hz PWB CIRCUIT DIAGRAM



	SMF-0Z405A-U2
IC202	X
IC203	X
IC212	X
IC213	X
IC301	X
Q301	X
Q302	X
Q303	X
L204	X
L205	X
L207	X
L208	X
L211	X
Y301	0
Y302	0
Y303	0

	SMF-0Z405A-U2
R226	0
R227	0
R228	0
R229	0
R230	0
R231	0
R232	0
R233	0
R234	0
R235	0
R236	0
R237	0
R238	0
R239	0
R240	0
R241	0
R242	0
R243	10k
R244	10k
R293	X
R301	X
R302	X
R303	X
R304	X
R305	X
R306	X
R307	X
R308	X

	SMF-0Z405A-U2
C219	X
C220	X
C221	X
C222	X
C223	X
C224	X
C225	X
C226	X
C227	X
C228	X
C229	X
C231	X
C232	X
C233	X
C234	X
C235	X
C239	X
C240	X
C241	X
C242	X
C253	X
C263	X
C273	X
C281	X
C282	X
C283	X
C284	X
C285	X
C286	X
C301	X
C302	X
C303	X

100Hz PWB
SMF0Z405A-U2

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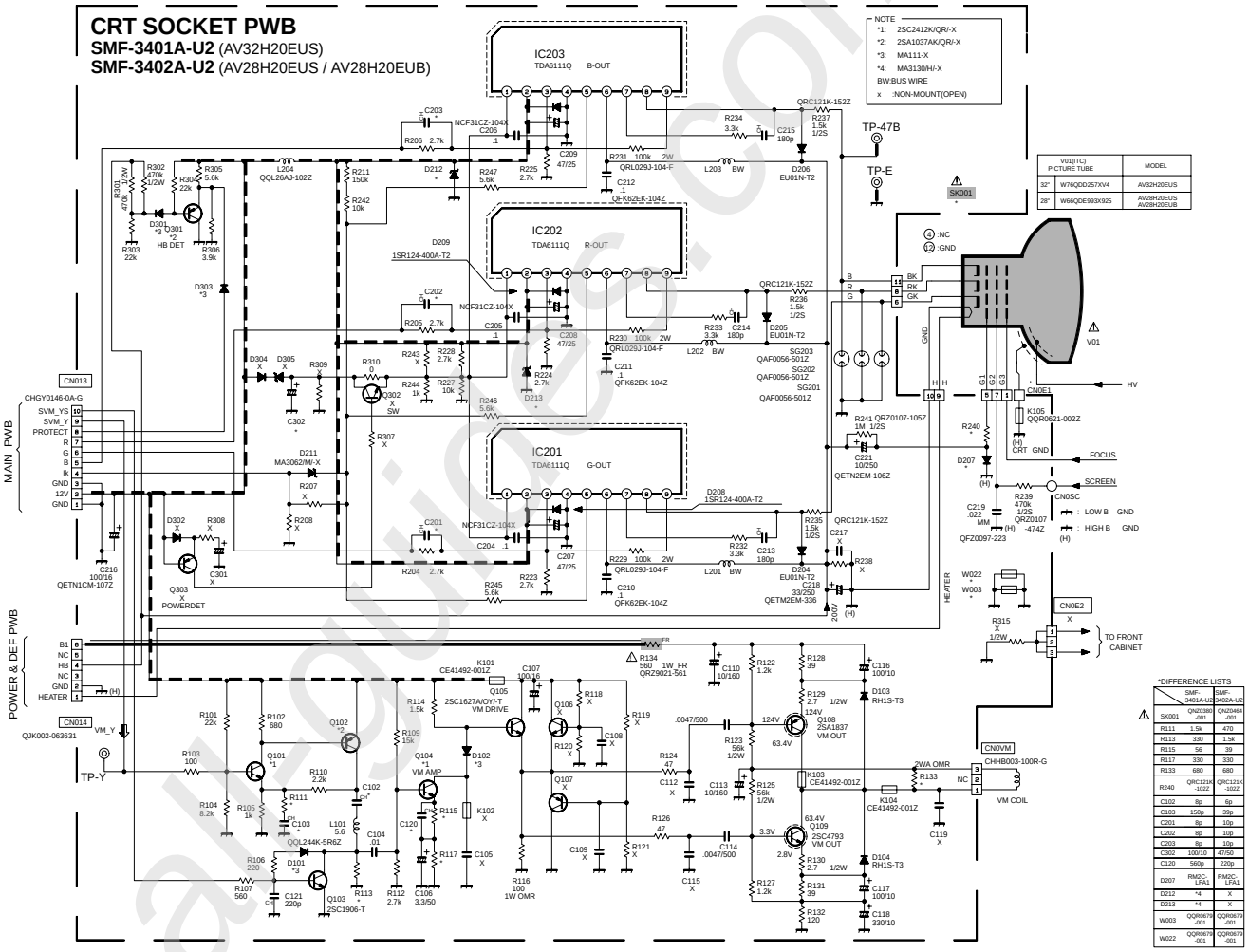
CRT SOCKET PWB CIRCUIT DIAGRAM

CRT SOCKET PWB

SMF-3401A-U2 (AV32H20EUS)
SMF-3402A-U2 (AV28H20EUS / AV28H20EUB)



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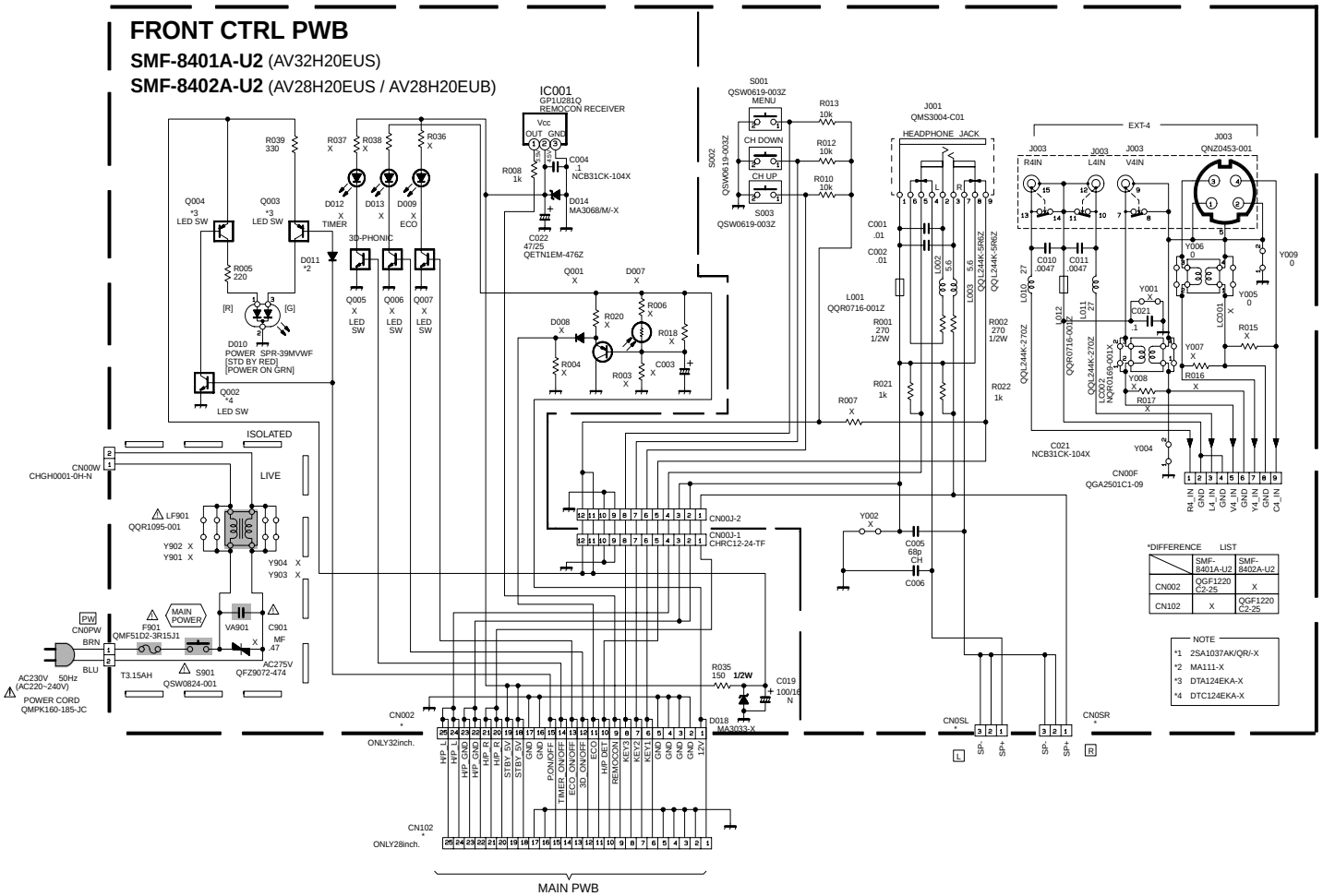
FRONT CONTROL PWB CIRCUIT DIAGRAM



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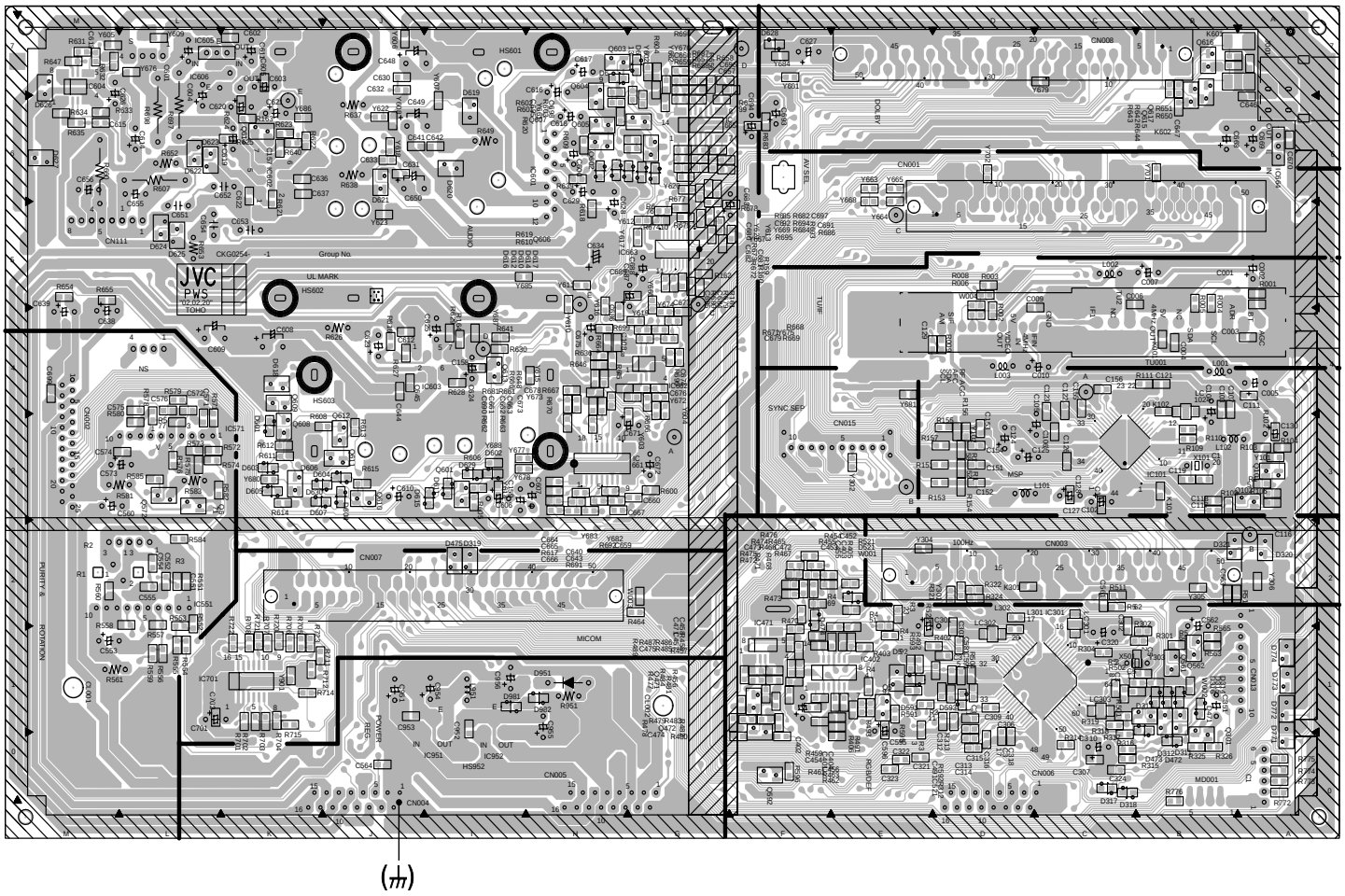
PATTERN DIAGRAMS *MAIN PWB PATTERN*

FRONT



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AV28H20EUB

AV32H20EUS
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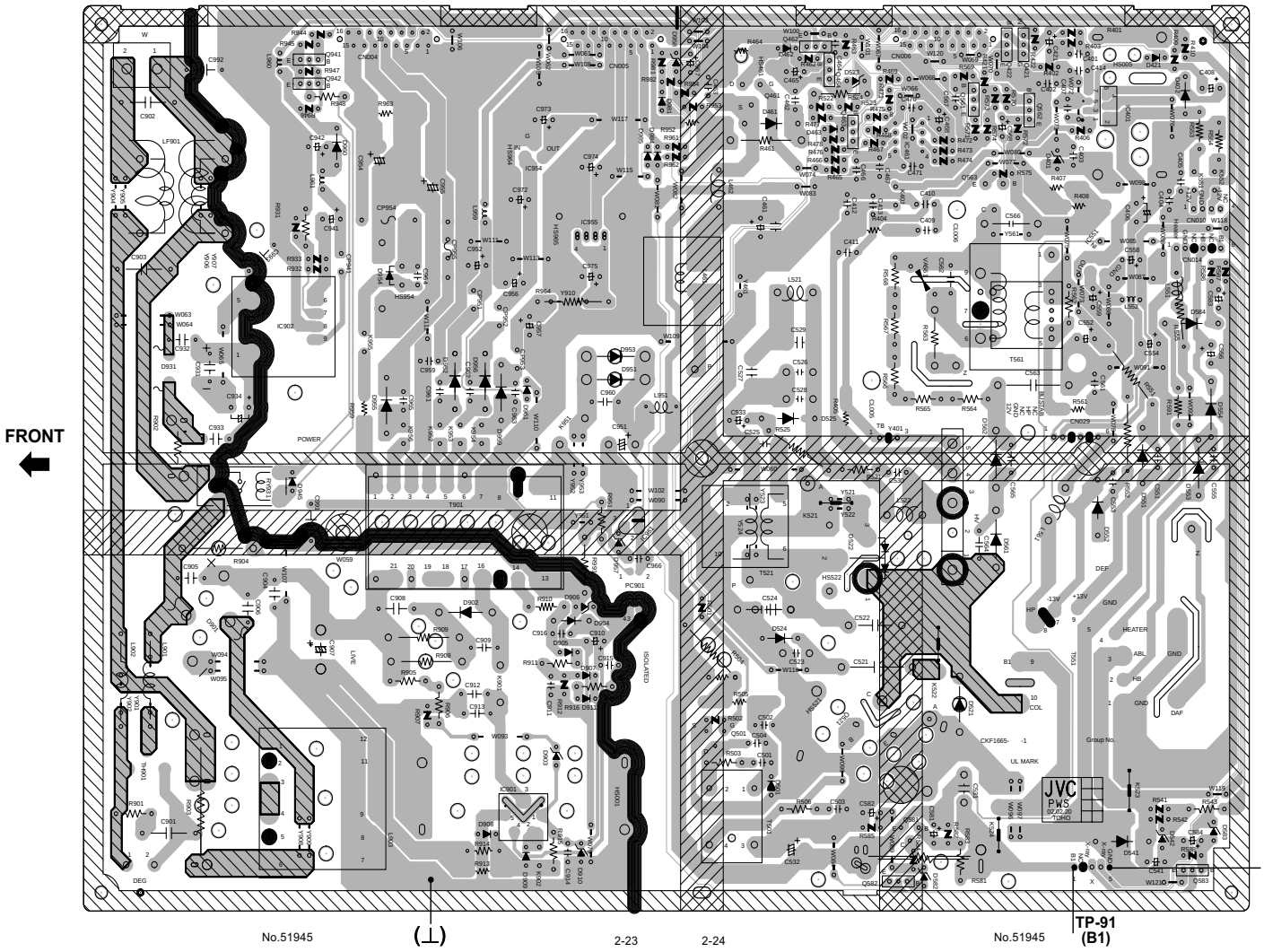
POWER & DEF PWB PATTERN



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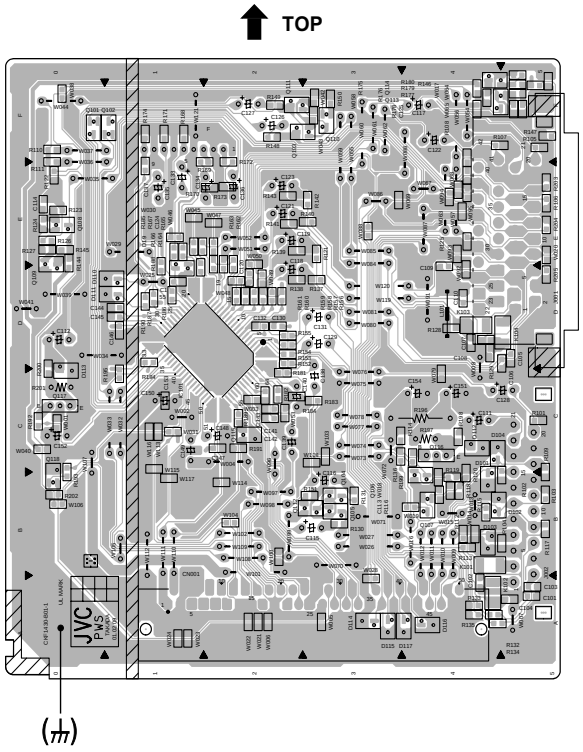
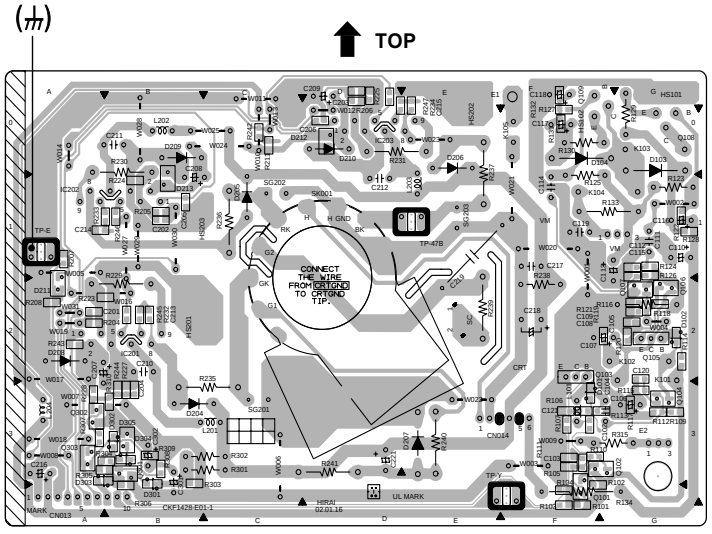
AV SW PWB PATTERN



CRT SOCKET PWB PATTERN



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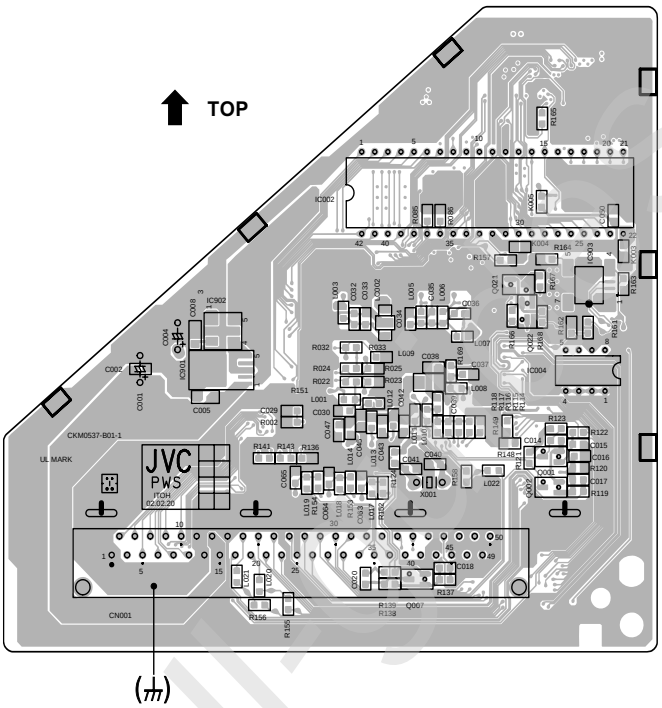
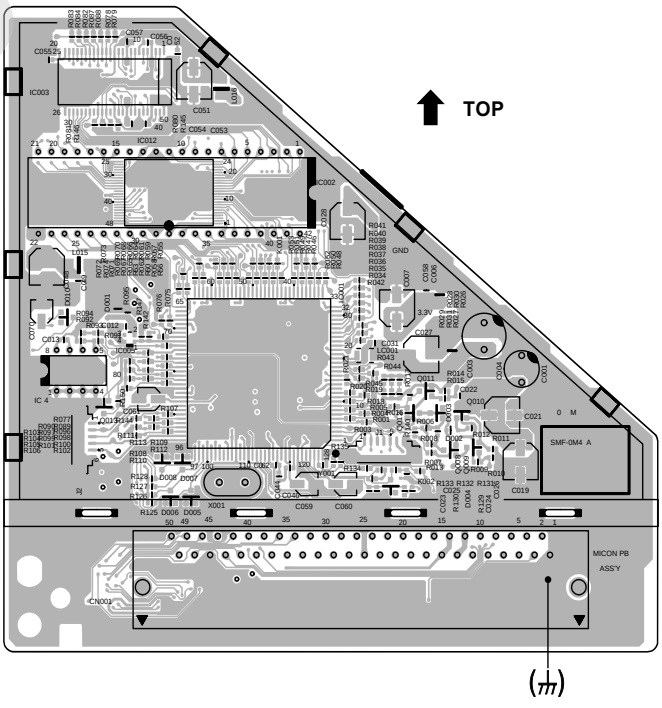
MICOM PWB PATTERN





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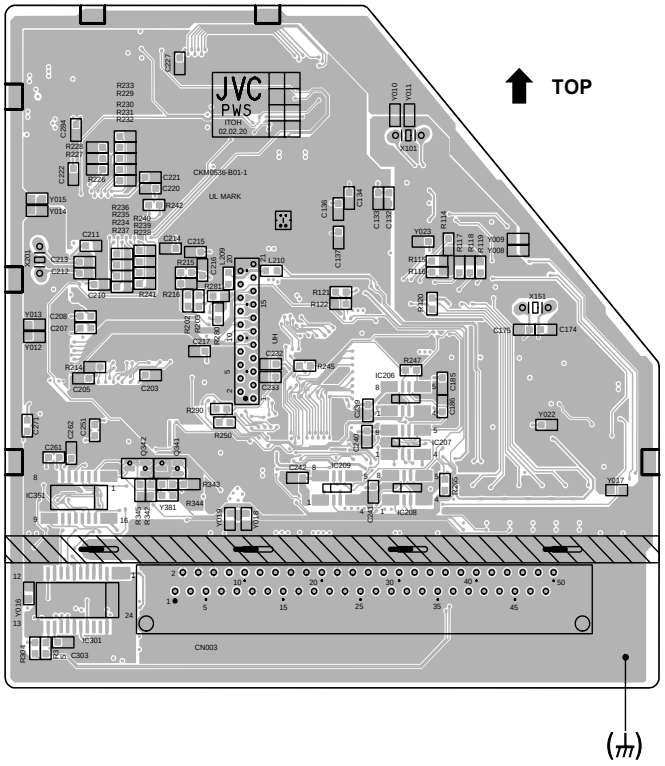
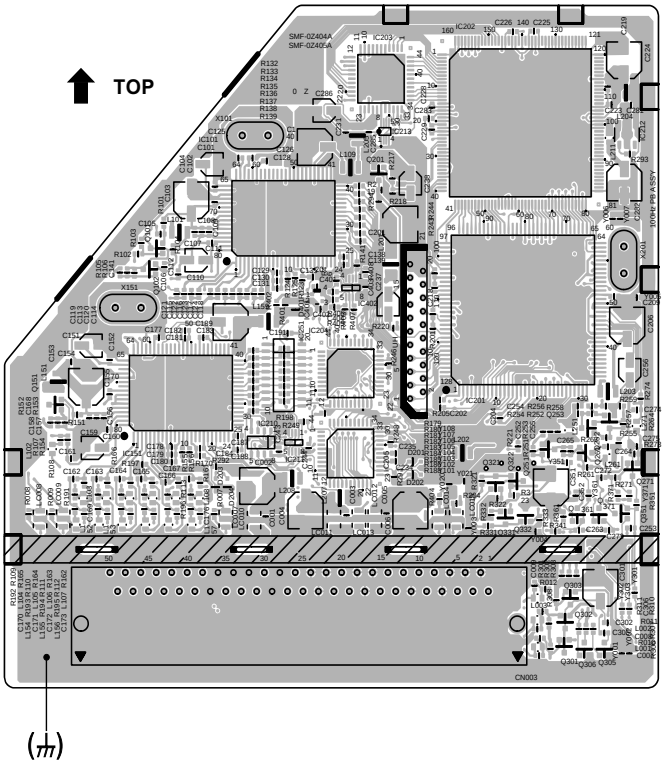
AV28H20EUB

AV32H20EUS
AV28H20EUS
AV28H20EUB

100Hz PWB PATTERN





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PARTS LIST

CAUTION

- The parts identified by the ⚠ symbol are important for the safety. Whenever replacing these parts, be sure to use specified ones to secure the safety .
- The parts not indicated in this Parts List and those which are filled with lines —— in the Parts No. columns will not be supplied.
- P. W. Board Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied.

ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
C R	Carbon Resistor	C CAP.	Ceramic Capacitor
F R	Fusible Resistor	E CAP.	Electrolytic Capacitor
P R	Plate Resistor	M CAP.	Mylar Capacitor
V R	Variable Resistor	HV CAP.	High Voltage Capacitor
HV R	High Voltage Resistor	MF CAP.	Metalized Film Capacitor
MF R	Metal Film Resistor	MM CAP.	Metalized Mylar Capacitor
MG R	Metal Glazed Resistor	MP CAP.	Metalized Polystyrol Capacitor
MP R	Metal Plate Resistor	PP CAP.	Polypropylene Capacitor
OM R	Metal Oxide Film Resistor	PS CAP.	Polystyrol Capacitor
CMF R	Coating Metal Film Resistor	TF CAP.	Thin Film Capacitor
UNF R	Non-Flammable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH V R	Chip Variable Resistor	TAN. CAP.	Tantalum Capacitor
CH MG R	Chip Metal Glazed Resistor	CH C CAP.	Chip Ceramic Capacitor
COMP. R	Composition Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

TOLERANCES									
F	G	J	K	M	N	R	H	Z	P
±1%	±2%	±5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% -0%

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AV32H20EUS

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- FRONT CONTROL PW BOARD ASS'Y ····· **53**
- MICOM PW BOARD ASS'Y ····· **53**
- AV SW PW BOARD ASS'Y ····· **53**
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USING PW BOARD & REMOTE CONTROL UNIT

Model / PWB ASS'Y	AV32H20EUS	AV28H20EUS	AV28H20EUB
MAIN PWB	SMF-1401A-U2	SMF-1402A-U2	←
POWER & DEF. PWB	SMF-2401A-U2	SMF-2402A-U2	←
CRT SOCKET PWB	SMF-3401A-U2	SMF-3402A-U2	←
FRONT CONTROL PWB	SMF-8401A-U2	SMF-8402A-U2	←
MICOM PWB	SMF0M401A-U2	←	←
AV SW PWB	SMF0S401A-U2	←	←
100Hz PWB	SMF0Z405A-U2	←	←
REMOTE CONTROL UNIT	RM-C54H-1C	←	RM-C50-1C

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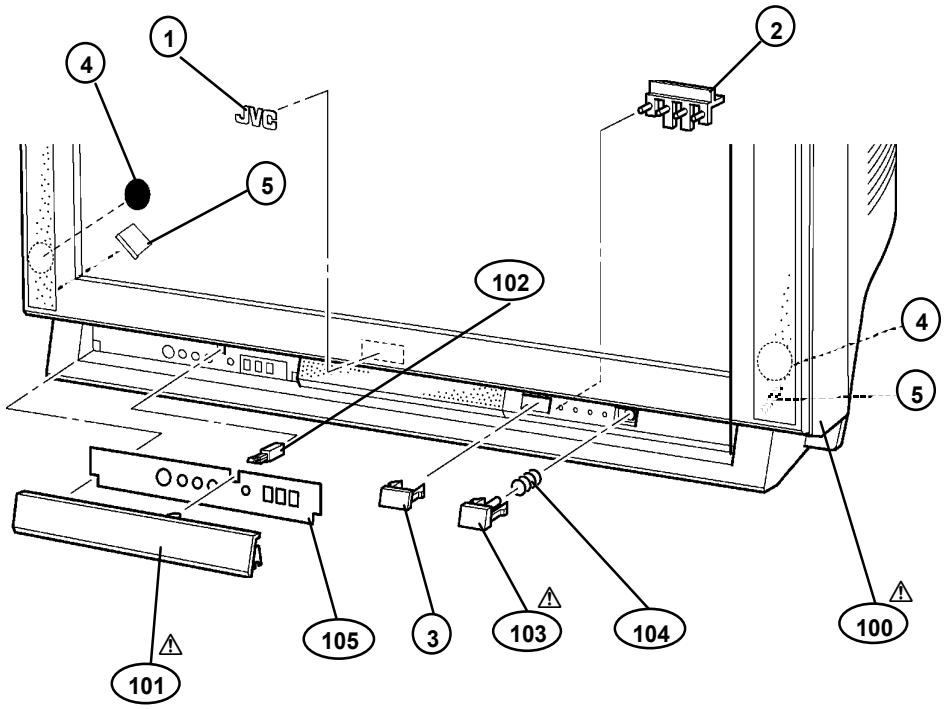
EXPLODED VIEW PARTS LIST

AV32H20EUS

⚠	Ref.No.	Part No.	Part Name	Description
	1	LC40354-003A-C	JVC MARK	
	2	LC30580-001C-C	LED LENS	
	3	LC30579-001B-C	REMOCON WINDOW	
	4	AEM4122-001A-E	CAB SPACER	(x2)
	5	AEM4069-A01-E	SPACER	(x2)
⚠	100	LC10376-020A-U	FRONT CABINET ASSY	Inc.No.101～105
⚠	101	LC20265-017A-U	DOOR	(SERVICE)
	102	CM48229-00A-C	DOOR LATCH	
⚠	103	LC30578-007B-U	POWER KNOB	(SERVICE)
	104	AEM3149-001-E	SPRING	
	105	LC31109-006A-U	CONTROL SHEET	

EXPLODED VIEW



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AV32H20EUS

⚠	Ref.No.	Part No.	Part Name	Description
⚠	V01	W76QDD257XV4	ITC TUBE(C)	Inc.DY,PC MAGNET,WEDGE
⚠	L01	QQW0105-001	DEGAUSSING COIL	
⚠	T2551	QQH0127-001	H.V.TRANSF.	
	6	WJY0001-010A	BRAIDED ASSY	
	7	WJY0013-002A	BRAIDED SUB ASSY	
	8	CHFD125-18BD	FFC WIRE	CN-1
⚠	9	LC10716-002F-U	CHASSIS BASE	
⚠	10	LC10717-005D-U	TERMINAL BOARD	
	11	QYSBSB3012M	TAPPING SCREW	(x3)
⚠	12	LC10380-001C-U	CONTROL BASE L	
⚠	13	LC10380-002B-U	CONTROL BASE R	
	14	QAS0088-001	SPEAKER	SP01-02(x2)
⚠	15	LC10720-001D-U	ADAPTER	(x2)
	16	LC40226-003A-H	SPACER	(x4)
	17	LC40506-001A	TAPPING SCREW	(x4)
⚠	18	QMPK160-185-JC	POWER CORD	CN-PW
⚠	19	CM46618-A01-E	POWER CORD CLAMP	
⚠	20	LC10378-004B-U	REAR COVER	
	21	QYSBSAG4016N	TAPPING SCREW	(x13)
⚠	22	LC20379-027A-U	RATING LABEL	
⚠	23	LC30789-002B-U	WARNING LABEL	
⚠	24	QQR0491-001	FILTER	

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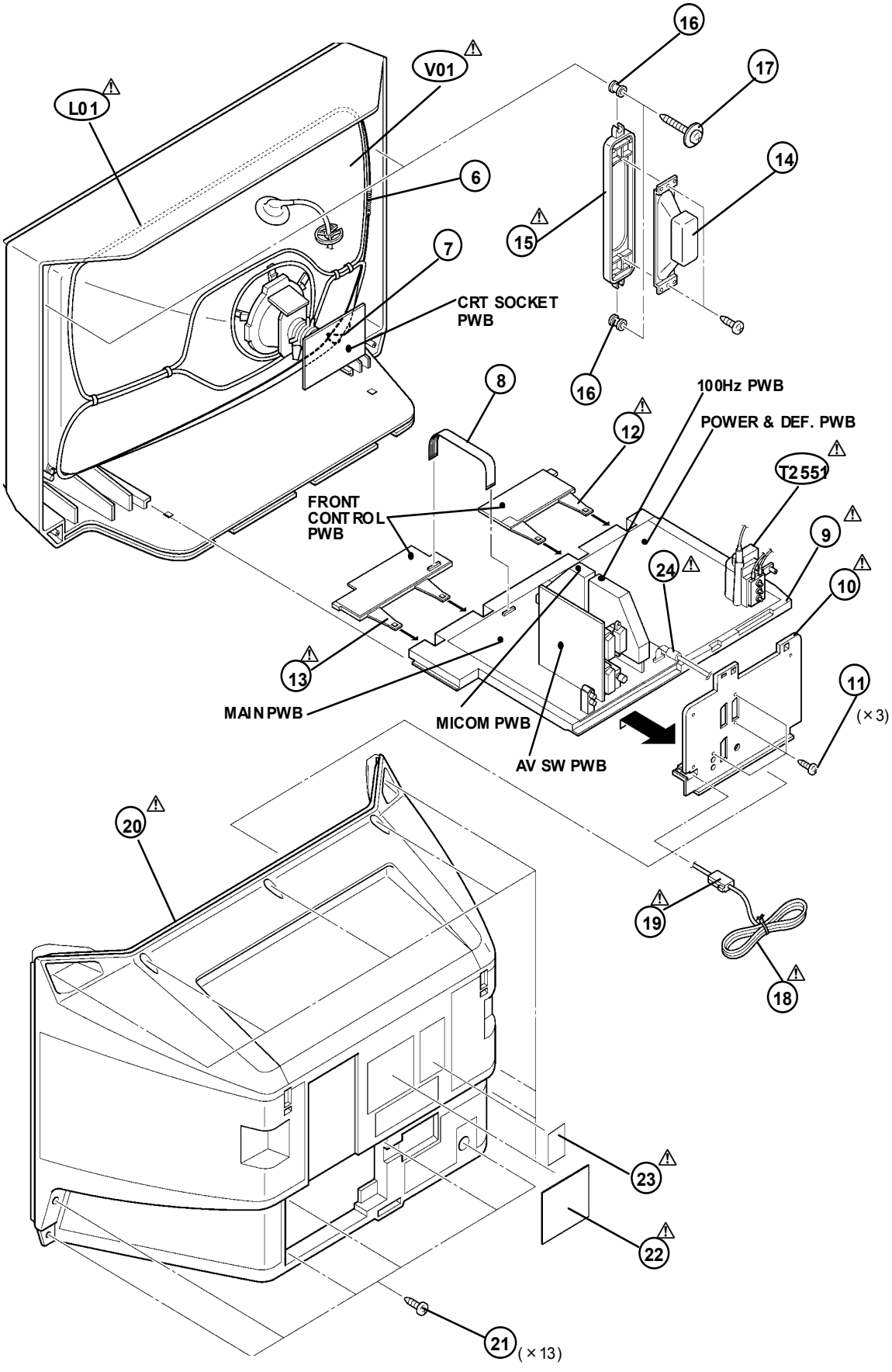
EXPLODED VIEW



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PRINTED WIRING BOARD PARTS LIST

■ MAIN P.W. BOARD ASS'Y (SMF-1401A-U2)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R1004-06	NRSA63J-101X	MG R	100Ω 1/16W J
	R1008-09	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1102	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1103	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R1104	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1105	NRSA63J-561X	MG R	560Ω 1/16W J
	R1106	NRSA63J-331X	MG R	330Ω 1/16W J
	R1108	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1109-11	NRSA63J-101X	MG R	100Ω 1/16W J
	R1151	NRSA63J-101X	MG R	100Ω 1/16W J
	R1153	NRSA63J-101X	MG R	100Ω 1/16W J
	R1156	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1158-59	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1161	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1301-02	NRSA63J-101X	MG R	100Ω 1/16W J
	R1303	NRSA63J-273X	MG R	27kΩ 1/16W J
	R1304	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1311	NRSA63J-331X	MG R	330Ω 1/16W J
	R1312	NRSA63J-273X	MG R	27kΩ 1/16W J
	R1313	NRSA63J-183X	MG R	18kΩ 1/16W J
	R1314	NRSA63J-221X	MG R	220Ω 1/16W J
	R1315-17	NRSA63J-101X	MG R	100Ω 1/16W J
	R1318	NRSA63J-562X	MG R	5.6kΩ 1/16W J
	R1319	NRSA63J-183X	MG R	18kΩ 1/16W J
	R1321-22	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1325	NRSA63J-101X	MG R	100Ω 1/16W J
	R1326	NRSA63J-682X	MG R	6.8kΩ 1/16W J
	R1401-02	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1403-04	NRSA63J-331X	MG R	330Ω 1/16W J
	R1405-06	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1451	NRSA63J-821X	MG R	820Ω 1/16W J
	R1454	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1455-56	NRSA63J-123X	MG R	12kΩ 1/16W J
	R1457	NRSA63J-392X	MG R	3.9kΩ 1/16W J
	R1458	NRSA63J-123X	MG R	12kΩ 1/16W J
	R1459	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1461	NRSA63J-123X	MG R	12kΩ 1/16W J
	R1462	NRSA63J-153X	MG R	15kΩ 1/16W J
	R1463	NRSA63J-124X	MG R	120kΩ 1/16W J
	R1464	NRSA63J-563X	MG R	56kΩ 1/16W J
	R1465-66	NRSA63J-224X	MG R	220kΩ 1/16W J
	R1467	NRSA63J-563X	MG R	56kΩ 1/16W J
	R1468	NRSA63J-224X	MG R	220kΩ 1/16W J
	R1469	NRSA63J-683X	MG R	68kΩ 1/16W J
	R1470	NRSA63J-223X	MG R	22kΩ 1/16W J
	R1471	NRSA63J-273X	MG R	27kΩ 1/16W J
	R1472	NRSA63J-682X	MG R	6.8kΩ 1/16W J
	R1473	NRSA63J-123X	MG R	12kΩ 1/16W J
	R1474	NRSA63J-563X	MG R	56kΩ 1/16W J
	R1475	NRSA63J-153X	MG R	15kΩ 1/16W J
	R1476-78	NRSA63J-123X	MG R	12kΩ 1/16W J
	R1479	NRSA63J-154X	MG R	150kΩ 1/16W J
	R1480	NRSA63J-823X	MG R	82kΩ 1/16W J
	R1481	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1482	NRSA63J-272X	MG R	2.7kΩ 1/16W J
	R1483	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1484	NRSA63J-473X	MG R	47kΩ 1/16W J
	R1485	NRSA63J-123X	MG R	12kΩ 1/16W J
	R1486	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1487	NRSA63J-333X	MG R	33kΩ 1/16W J
	R1489	NRSA63J-333X	MG R	33kΩ 1/16W J
	R1491	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1492	NRSA63J-562X	MG R	5.6kΩ 1/16W J
	R1493	NRSA63J-183X	MG R	18kΩ 1/16W J

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R1501	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1504	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1511	NRSA63J-152X	MG R	1.5kΩ 1/16W J
	R1512	NRSA63J-332X	MG R	3.3kΩ 1/16W J
	R1521	NRSA63J-223X	MG R	22kΩ 1/16W J
	R1522	NRSA63J-562X	MG R	5.6kΩ 1/16W J
	R1551	NRSA63J-100X	MG R	10Ω 1/16W J
	R1552	NRSA63J-124X	MG R	120kΩ 1/16W J
	R1553	NRSA63J-683X	MG R	68kΩ 1/16W J
	R1554	NRSA63J-562X	MG R	5.6kΩ 1/16W J
	R1555	NRSA63J-333X	MG R	33kΩ 1/16W J
	R1556	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R1557	NRSA63J-562X	MG R	5.6kΩ 1/16W J
	R1558	NRSA63J-104X	MG R	100kΩ 1/16W J
	R1559	NRSA63J-154X	MG R	150kΩ 1/16W J
	R1560	NRSA63J-100X	MG R	10Ω 1/16W J
	R1561	QRN143J-0R0X	C R	0.0Ω 1/4W J
	R1562	NRSA63J-683X	MG R	68kΩ 1/16W J
	R1563	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1564	NRSA63J-223X	MG R	22kΩ 1/16W J
	R1565	NRSA63J-562X	MG R	5.6kΩ 1/16W J
	R1591	NRSA63J-561X	MG R	560Ω 1/16W J
	R1592	NRSA63J-332X	MG R	3.3kΩ 1/16W J
	R1595	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R1596	NRSA63J-104X	MG R	100kΩ 1/16W J
	R1601	NRSA63J-273X	MG R	27kΩ 1/16W J
	R1602	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1603	NRSA63J-273X	MG R	27kΩ 1/16W J
	R1604	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1605	NRSA63J-473X	MG R	47kΩ 1/16W J
	R1606	NRSA63J-273X	MG R	27kΩ 1/16W J
	R1609	NRSA63J-104X	MG R	100kΩ 1/16W J
	R1610	NRSA63J-682X	MG R	6.8kΩ 1/16W J
	R1618	NRSA63J-333X	MG R	33kΩ 1/16W J
	R1619	NRSA63J-104X	MG R	100kΩ 1/16W J
	R1620	NRSA63J-562X	MG R	5.6kΩ 1/16W J
	R1637	QRK126J-2R2X	C R	2.2Ω 1/2W J
	R1639	NRSA63J-561X	MG R	560Ω 1/16W J
	R1642-43	NRSA63J-681X	MG R	680Ω 1/16W J
	R1644	NRSA63J-104X	MG R	100kΩ 1/16W J
	R1645-46	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1649	QRK126J-2R2X	C R	2.2Ω 1/2W J
	R1650-51	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1654-55	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1664-65	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1666	NRSA63J-473X	MG R	47kΩ 1/16W J
	R1667	NRSA63J-183X	MG R	18kΩ 1/16W J
	R1668	NRSA63J-473X	MG R	47kΩ 1/16W J
	R1669	NRSA63J-183X	MG R	18kΩ 1/16W J
	R1670-71	NRSA63J-104X	MG R	100kΩ 1/16W J
	R1672	NRSA63J-223X	MG R	22kΩ 1/16W J
	R1673	NRSA63J-273X	MG R	27kΩ 1/16W J
	R1675	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1677-78	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1679	NRSA63J-223X	MG R	22kΩ 1/16W J
	R1680	NRSA63J-273X	MG R	27kΩ 1/16W J
	R1684	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1687	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	R1701-02	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1703-04	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1705-08	NRSA63J-103X	MG R	10kΩ 1/16W J
	R1711-12	NRSA63J-101X	MG R	100Ω 1/16W J
	R1714-15	NRSA63J-102X	MG R	1kΩ 1/16W J
	R1720-22	NRSA63J-102X	MG R	1kΩ 1/16W J

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⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R1772-76	NRSA63J-221X	MG R	220Ω 1/16W J
	R1951	QRK126J-220X	C R	22Ω 1/2W J
	CAPACITOR			
	C1001	NCB31HK-222X	C CAP.	2200pF 50V K
	C1002	QETN1HM-106Z	E CAP.	10μF 50V M
	C1004	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1005	QETN1CM-108Z	E CAP.	1000μF 16V M
	C1006	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1007	QETN1HM-106Z	E CAP.	10μF 50V M
	C1009	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1010	QETN1HM-106Z	E CAP.	10μF 50V M
	C1101	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1102	QETN1HM-106Z	E CAP.	10μF 50V M
	C1103	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1104	QETN1CM-107Z	E CAP.	100μF 16V M
	C1105	QETN1HM-106Z	E CAP.	10μF 50V M
	C1106-07	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1108	NDC31HJ-680X	C CAP.	68pF 50V J
	C1111	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1116	NCB31HK-472X	C CAP.	4700pF 50V K
	C1117-18	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1119-20	NDC31HJ-2R0X	C CAP.	2.0pF 50V J
	C1121	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1122-23	NDC31HJ-102X	C CAP.	1000pF 50V J
	C1124-25	QETN1HM-106Z	E CAP.	10μF 50V M
	C1126	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1127	QETN1HM-106Z	E CAP.	10μF 50V M
	C1128	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1129	NCF31AZ-105X	C CAP.	1μF 10V Z
	C1130	QETN1HM-106Z	E CAP.	10μF 50V M
	C1151-54	NCF31AZ-105X	C CAP.	1μF 10V Z
	C1155-56	NDC31HJ-102X	C CAP.	1000pF 50V J
	C1301	QETN1CM-107Z	E CAP.	100μF 16V M
	C1302-03	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1305-09	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1310	QETN1AM-228Z	E CAP.	2200μF 10V M
	C1311	NCB31CK-683X	CHIP CAP.	0.068μF 16V K
	C1312	NDC31HJ-221X	C CAP.	220pF 50V J
	C1313-15	NCB31HK-223X	C CAP.	0.022μF 50V K
	C1316-18	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1320	QETN0JM-228Z	E CAP.	2200μF 6.3V M
	C1321-23	NCB31HK-223X	C CAP.	0.022μF 50V K
	C1324	NDC31HJ-820X	C CAP.	82pF 50V J
	C1351	QEN C1EM-106Z	BP E CAP.	10μF 25V M
	C1401	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1402	QETN1CM-107Z	E CAP.	100μF 16V M
	C1403-04	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1453	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1454	NCB31EK-333X	C CAP.	0.033μF 25V K
	C1455-56	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1457	NCB31EK-333X	C CAP.	0.033μF 25V K
	C1458	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1471	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1472	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1473	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1474	NCB31EK-333X	C CAP.	0.033μF 25V K
	C1475	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1491	NCB31EK-473X	C CAP.	0.047μF 25V K
	C1501-02	NDC31HJ-150X	C CAP.	15pF 50V J
	C1551-52	NCF31CZ-224X	C CAP.	0.22μF 16V Z
	C1553	QETN1EM-476Z	E CAP.	47μF 25V M
	C1554-55	NCF31CZ-224X	C CAP.	0.22μF 16V Z
	C1560	QETN1CM-107Z	E CAP.	100μF 16V M

⚠	Symbol No.	Part No.	Part Name	Description
	CAPACITOR			
	C1561	NDC31HJ-561X	C CAP.	560pF 50V J
	C1562	QETN1HM-105Z	E CAP.	1μF 50V M
	C1564	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1591	NDC31HJ-471X	C CAP.	470pF 50V J
	C1596	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1600	QETN1HM-226Z	E CAP.	22μF 50V M
	C1606-07	QETN1CM-227Z	E CAP.	220μF 16V M
	C1616	QETN1HM-105Z	E CAP.	1μF 50V M
	C1618	QETN1HM-105Z	E CAP.	1μF 50V M
	C1628	QETN1HM-107Z	E CAP.	100μF 50V M
	C1629	QETN1HM-106Z	E CAP.	10μF 50V M
	C1630	NCF21HZ-224X	C CAP.	0.22μF 50V Z
	C1632	NCF21HZ-224X	C CAP.	0.22μF 50V Z
	C1634	QETM1HM-228	E CAP.	2200μF 50V M
	C1641-42	NCF21HZ-224X	C CAP.	0.22μF 50V Z
	C1646-47	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1648-49	QETM1VM-108	E CAP.	1000μF 35V M
	C1673-74	NCF31AZ-105X	C CAP.	1μF 10V Z
	C1675	QETN1EM-476Z	E CAP.	47μF 25V M
	C1676-77	NDC31HJ-151X	C CAP.	150pF 50V J
	C1678-79	NDC31HJ-150X	C CAP.	15pF 50V J
	C1680	NCF31AZ-105X	C CAP.	1μF 10V Z
	C1681	NCB31HK-332X	C CAP.	3300pF 50V K
	C1682	NCB31EK-333X	C CAP.	0.033μF 25V K
	C1683	QETN1EM-476Z	E CAP.	47μF 25V M
	C1684	NCB31HK-332X	C CAP.	3300pF 50V K
	C1685	NCB31EK-333X	C CAP.	0.033μF 25V K
	C1686	NCF31AZ-105X	C CAP.	1μF 10V Z
	C1687	QETN1HM-106Z	E CAP.	10μF 50V M
	C1688	QETN1EM-476Z	E CAP.	47μF 25V M
	C1689	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1695	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	C1698	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	C1699	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1701	QETN1HM-106Z	E CAP.	10μF 50V M
	C1702	NCB31CK-563X	CHIP CAP.	0.056μF 16V K
	C1951	QETN1CM-477Z	E CAP.	470μF 16V M
	C1952-53	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1954	QETN1AM-477Z	E CAP.	470μF 10V M
	C1955	QETN1AM-227Z	E CAP.	220μF 10V M
	C1956	QETN1AM-107Z	E CAP.	100μF 10V M
	COIL			
	L1001	QQL244K-270Z	PEAKING COIL	
	L1002-03	QQL244K-100Z	COIL	10μH K
	L1101	QRN143J-0R0X	C R	0.0Ω 1/4W J
	L1102	QQL244K-4R7Z	COIL	4.7μH K
	L1301-02	NQL092K-1R5X	INDUCTOR	
	L1951	QQL26AM-5R6Z	CHOKE COIL	
	DIODE			
	D1317-18	MA111-X	SI.DIODE	
	D1319	MA3036-X	ZENER DIODE	
	D1320-21	MA3056/M/-X	ZENER DIODE	
	D1471-74	MA111-X	SI.DIODE	
	D1475	MA3240/M/-X	CHIP ZENER DIODE	
	D1521	MA111-X	SI.DIODE	
	D1591	MA111-X	SI.DIODE	
	D1592	MA3051/M/-X	ZENER DIODE	
	D1593	MA111-X	SI.DIODE	
	D1602	MA111-X	SI.DIODE	
	D1610-11	MA111-X	SI.DIODE	
	D1614-15	MA111-X	SI.DIODE	
	D1617	MA111-X	SI.DIODE	
	D1619-20	MA3330/L/-X	ZENER DIODE	

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⚠	Symbol No.	Part No.	Part Name	Description
	DIODE			
	D1771-74	MA3056/M/-X	ZENER DIODE	
	D1951	1SR35-400A-T2	SI.DIODE	
	D1981-82	MA111-X	SI.DIODE	
	TRANSISTOR			
	Q1101-02	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1301	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q1471-72	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1561	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1562	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q1591	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q1592	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1601-02	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q1604-05	DTC124EKA-X	DIGI.TRANSISTOR	
	Q1606	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1607	DTA124EKA-X	DIGI.TRANSISTOR	
	Q1615	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q1616-17	DTC323TK-X	DIGI.TRANSISTOR	
	IC			
	IC1101	MSP3415DQGB3GHX	I.C(MONO-ANA)	
	IC1301	SDA9380	I.C(M)	
	IC1402	BA10324AF-XE	I.C(MONO-ANA)	
	IC1471	BA10358F-XE	I.C(M)	
	IC1551	LA6515	I.C(MONO-ANA)	
	IC1601	TA8246AH	I.C(HYBRID)	
	IC1662	BA4558F-X	I.C(MONO-ANA)	
	IC1663	NJM2150AM-X	I.C(MONO-ANA)	
	IC1701	JLC1562BF-X	I.C(DIGI-MOS)	
	IC1951	BA09T	I.C(MONO-ANA)	
	IC1952	BA08T	I.C(MONO-ANA)	
	OTHERS			
	CN1013	QGA2501C1-10	W TO B CONNE	
	LC1102	NQR0431-001X	EMI FILTER	
	LC1301-03	NQR0431-001X	EMI FILTER	
	J1001	QNN0296-001	PIN JACK	
	K1001	NQR0389-003X	FERRITE BEADS	
	K1101-02	NQR0389-003X	FERRITE BEADS	
	K1301	NQR0413-003X	BEADS CORE	
	K1601-02	CE42681-001Y	BEADS CORE	
	TU1001	QAU0276-001	TUNER	
	X1101	CE42546-001Z	CRYSTAL	
	X1501	QAX0549-001Z	CRYSTAL	
	Y1612-13	NCF21CZ-105X	C CAP.	1µF 16V Z

■POWER & DEF. P.W. BOARD ASS'Y

(SMF-2401A-U2)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R2401-02	QRE141J-562Y	C R	5.6kΩ 1/4W J
	R2403	QRE141J-222Y	C R	2.2kΩ 1/4W J
	R2404	QRX01GJ-1R0	MF R	1.0Ω 1W J
	R2405	QRL029J-151	OM R	150Ω 2W J
	R2406	QRE141J-222Y	C R	2.2kΩ 1/4W J
	R2407	QRX01GJ-2R2	MF R	2.2Ω 1W J
	R2408	QRX01GJ-1R5	MF R	1.5Ω 1W J
	R2409	QRE141J-823Y	C R	82kΩ 1/4W J
	R2410	QRE141J-103Y	C R	10kΩ 1/4W J
	R2421	QRE141J-103Y	C R	10kΩ 1/4W J
	R2422	QRE141J-274Y	C R	270kΩ 1/4W J
	R2461	QRG029J-820	OM R	82 Ω 2W J
	R2462	QRE141J-473Y	C R	47kΩ 1/4W J
	R2463	QRE141J-682Y	C R	6.8kΩ 1/4W J
	R2464	QRX01GJ-3R3	MF R	3.3Ω 1W J
	R2468	QRE141J-102Y	C R	1kΩ 1/4W J
	R2469	QRE141J-272Y	C R	2.7kΩ 1/4W J
	R2471	QRE141J-391Y	C R	390Ω 1/4W J
	R2472	QRA14CF-1002Y	MF R	10kΩ 1/4W F
	R2473	QRE141J-473Y	C R	47kΩ 1/4W J
	R2474	QRE141J-103Y	C R	10kΩ 1/4W J
	R2475	QRE141J-102Y	C R	1kΩ 1/4W J
	R2476	QRE141J-102Y	C R	1kΩ 1/4W J
	R2477	QRE141J-563Y	C R	56kΩ 1/4W J
	R2478	QRE141J-333Y	C R	33kΩ 1/4W J
	R2501	QRE141J-471Y	C R	470Ω 1/4W J
	R2502	QRE141J-123Y	C R	12kΩ 1/4W J
	R2503	QRE121J-152Y	C R	1.5kΩ 1/2W J
	R2504-05	QRL039J-222	OM R	2.2kΩ 3W J
	R2506	QRE121J-5R6Y	C R	5.6Ω 1/2W J
	R2521	QRE121J-471Y	C R	470Ω 1/2W J
	R2522	QRE141J-223Y	C R	22kΩ 1/4W J
	R2523	QRE141J-103Y	C R	10kΩ 1/4W J
	R2524	QRC121K-152Z	COMP.R	1.5kΩ 1/2W K
	R2525	QRL039J-103	OM R	10kΩ 3W J
	R2541	QRE141J-182Y	C R	1.8kΩ 1/4W J
	R2542	QRE141J-222Y	C R	2.2kΩ 1/4W J
	R2543	QRE121J-272Y	C R	2.7kΩ 1/2W J
⚠	R2551	QRZ9022-R47	F R	0.47 Ω 1W K
⚠	R2552	QRZ9022-R47	F R	0.47 Ω 1W K
⚠	R2555	QRZ9022-R33	F R	0.33 Ω 1W K
	R2561	QRG01GJ-220	OM R	22Ω 1W J
	R2562	QRE121J-123Y	C R	12kΩ 1/2W J
	R2563	QRZ0056-103Z	COMP R	10kΩ 1/2W K
	R2581	QRF154K-4R7	UNF R	4.7Ω 15W K
	R2582	QRE141J-681Y	C R	680Ω 1/4W J
	R2583	QRE121J-682Y	C R	6.8kΩ 1/2W J
	R2584	QRE141J-183Y	C R	18kΩ 1/4W J
	R2585	QRE141J-222Y	C R	2.2kΩ 1/4W J
	R2586	QRA14CF-6201Y	MF R	6.2kΩ 1/4W F
	R2587	QRA14CF-2801Y	MF R	2.8kΩ 1/4W F
	R2588	QRE141J-103Y	C R	10kΩ 1/4W J
⚠	R2591	QRZ9017-4R7	F R	4.7 Ω 1/4W J
	R2901	QRE121J-331Y	C R	330Ω 1/2W J
	R2902	QRF054K-3R3	UNF R	3.3Ω 5W K
	R2903	QRF104K-3R9	UNF R	3.9Ω 10W K
	R2904	QRL039J-683	OM R	68kΩ 3W J
	R2905-06	QRE121J-474Y	C R	470kΩ 1/2W J
	R2908-09	QRL039J-823	OM R	82kΩ 3W J
⚠	R2910	QRZ9017-100	F R	10 Ω 1/4W K
	R2911	QRE121J-152Y	C R	1.5kΩ 1/2W J
	R2914	QRM059J-R10	MP R	0.10Ω 5W J
	R2915	QRE121J-681Y	C R	680Ω 1/2W J
	R2916	QRE121J-332Y	C R	3.3kΩ 1/2W J

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⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R2931	QRE141J-1R0Y	C R	1.0Ω 1/4W J
	R2932	QRE141J-1R5Y	C R	1.5Ω 1/4W J
	R2933	QRE141J-1R8Y	C R	1.8Ω 1/4W J
	R2944	QRE141J-103Y	C R	10kΩ 1/4W J
	R2945	QRE141J-563Y	C R	56kΩ 1/4W J
	R2946	QRE141J-103Y	C R	10kΩ 1/4W J
	R2951	QRE121J-102Y	C R	1kΩ 1/2W J
	R2952	QRL039J-223	OM R	22kΩ 3W J
	R2953	QRE141J-474Y	C R	470kΩ 1/4W J
	R2954	QRE141J-103Y	C R	10kΩ 1/4W J
	R2981	QRE141J-153Y	C R	15kΩ 1/4W J
	R2982	QRE141J-102Y	C R	1kΩ 1/4W J
⚠	R2991	QRZ9046-825Z	C R	8.2MΩ 1/2W K
	CAPACITOR			
	C2404	QCZ0120-104Z	C CAP.	0.1μF 25V Z
	C2405	QDC31HJ-820Z	C CAP.	82pF 50V J
	C2406	QETM1VM-108	E CAP.	1000μF 35V M
	C2408	QETN1VM-337Z	E CAP.	330μF 35V M
	C2409-10	QFV71HJ-474Z	MF CAP.	0.47μF 50V J
	C2411	QFLC2AJ-104Z	M CAP.	0.1μF 100V J
	C2414	QCB31HK-682Z	C CAP.	6800pF 50V K
	C2421	QETN1HM-105Z	E CAP.	1μF 50V M
	C2461	QEZ0414-226	E CAP.	22μF 50V M
	C2462	QFM72DJ-152Z	M CAP.	1500pF 200V J
	C2463	QFM72DJ-122Z	M CAP.	1200pF 200V J
	C2464	QCZ0120-104Z	C CAP.	0.1μF 25V Z
	C2465	QETN1HM-106Z	E CAP.	10μF 50V M
	C2466	QFP31HJ-272Z	PP CAP.	2700pF 50V J
	C2467	QFLC1HJ-102Z	M CAP.	1000pF 50V J
	C2468	QETN1EM-476Z	E CAP.	47μF 25V M
	C2470	QCS31HJ-470Z	C CAP.	47pF 50V J
	C2471	QFLC1HJ-103Z	M CAP.	0.01μF 50V J
	C2501	QCB32HK-331Z	C CAP.	330pF 500V K
	C2502	QFM72DK-103	M CAP.	0.01μF 200V K
	C2503	QFV71HJ-224Z	MF CAP.	0.22μF 50V J
⚠	C2521	QFZ0122-112	MPP CAP.	1100pF1.8kVH±3%
⚠	C2522	QFZ0200-123	MPP CAP.	0.012μF1.5kVH±3%
	C2523	QFM72DK-393	M CAP.	0.039μF 200V K
⚠	C2524	QFP32JJ-183	PP CAP.	0.018μF 630V J
	C2526	QFZ0197-204	MPP CAP.	0.2μF 250V J
	C2527	QFZ0194-154	MPP CAP.	0.15μF 250V J
	C2529	QFZ0194-154	MPP CAP.	0.15μF 250V J
	C2530	QCB32HK-561Z	C CAP.	560pF 500V K
	C2531	QFZ0194-534	MPP CAP.	0.53μF 250V J
	C2532	QETM2CM-227	E CAP.	220μF 160V M
	C2533	QETN2EM-475Z	E CAP.	4.7μF 250V M
	C2541	QENC1HM-105Z	E CAP.	1μF 50V M
	C2551	QCB32HK-152Z	C CAP.	1500pF 500V K
	C2552	QETN1CM-108Z	E CAP.	1000μF 16V M
	C2553	QCB32HK-152Z	C CAP.	1500pF 500V K
	C2554	QETN1CM-108Z	E CAP.	1000μF 16V M
	C2555	QCB32HK-102Z	C CAP.	1000pF 500V K
	C2556	QETN2EM-106Z	E CAP.	10μF 250V M
	C2558	QETN1CM-477Z	E CAP.	470μF 16V M
	C2559	QEHR1CM-227Z	E CAP.	220μF 16V M
	C2561	QFLC2AJ-223Z	M CAP.	0.022μF 100V J
	C2581	QETN1CM-107Z	E CAP.	100μF 16V M
	C2582	QETN1EM-476Z	E CAP.	47μF 25V M
	C2583	QETN2AM-106Z	E CAP.	10μF 100V M
	C2584	QETN1AM-227Z	E CAP.	220μF 10V M
⚠	C2901	QFZ9072-473	MM CAP.	0.47μFAC275V K
⚠	C2902	QFZ9072-104	MF CAP.	0.1μFAC275V K
⚠	C2903	QFZ9072-473	MM CAP.	0.47μFAC275V K

⚠	Symbol No.	Part No.	Part Name	Description
	CAPACITOR			
	C2904	QCZ9054-472	C CAP.	4700pFAC250V Z
	C2905	QCZ9054-472	C CAP.	4700pFAC250V Z
	C2906	QCZ9054-472	C CAP.	4700pFAC250V Z
	C2907	QEZ0199-227	E CAP.	220μF 400V M
	C2908	QCB32HK-103	C CAP.	0.01μF 500V K
	C2909	QCZ0340-391	C CAP.	390pF 2kV K
	C2910	QETN1HM-476Z	E CAP.	47μF 50V M
	C2911	QCB31HK-102Z	C CAP.	1000pF 50V K
	C2912	QCZ0340-561	C CAP.	560pF 2kV K
	C2914	QCB31HK-471Z	C CAP.	470pF 50V K
	C2915	QFLC1HJ-104Z	M CAP.	0.1μF 50V J
	C2916	QCB32HK-152Z	C CAP.	1500pF 500V K
⚠	C2931	QCZ9054-472	C CAP.	4700pFAC250V Z
⚠	C2932	QCZ9054-472	C CAP.	4700pFAC250V Z
⚠	C2933	QCZ9054-472	C CAP.	4700pFAC250V Z
	C2934	QETM2GM-226	E CAP.	22μF 400V M
	C2941	QTMN1CM-477Z	E CAP.	470μF 16V M
	C2942	QETN1AM-337Z	E CAP.	330μF 10V M
	C2951	QEZ0203-227	E CAP.	220μF 160V M
	C2952	QETN1CM-108Z	E CAP.	1000μF 16V M
	C2955	QETM1VM-228	E CAP.	2200μF 35V M
	C2956	QETN1AM-108Z	E CAP.	1000μF 10V M
	C2957	QETN1AM-228Z	E CAP.	2200μF 10V M
	C2959	QFV71HJ-684Z	MF CAP.	0.68μF 50V J
	C2960	QCZ0325-821	C CAP.	820pF 2kV K
	C2972-73	QETN1AM-477Z	E CAP.	470μF 10V M
	C2974	QETN0JM-228Z	E CAP.	2200μF 6.3V M
	C2975	QETN1AM-228Z	E CAP.	2200μF 10V M
⚠	C2991	QCZ9079-222	C CAP.	2200pFAC250V M
⚠	C2993	QCZ9079-471	C CAP.	470pFAC250V K
	TRANSFORMER			
	T2501	QQR0882-001	HOR.DEF.TRANSF.	
⚠	T2551	QQH0127-001	H.V.TRANSF.	
	T2561	QQR1096-001	DEF.TRANSF	
⚠	T2901	QQS0156-001	SWITCH.TRANSF.	
	COIL			
	L2461	QQR1195-001	CHOKE COIL	
	L2462	QQLZ028-272	CHOKE COIL	
	L2521	QQLZ031-180	CHOKE COIL	
	L2522	QQR1191-001	LINEARITY COIL	
	L2552	QQL26AK-220Z	COIL	22μH K
	L2561	QQLZ028-272	CHOKE COIL	
	L2901-02	QQL401K-100Z	CHOKE COIL	
	L2903	QQR1200-001	CHOKE COIL	
	L2951	QQLZ026-460	HEATER CHOKE	
	L2959-60	QQL26AK-220Z	COIL	22μH K
	L2961	QQL26AM-4R7Z	CHOKE COIL	
	DIODE			
	D2402	1SR35-400A-T2	SI.DIODE	
	D2421	1SS133-T2	SI.DIODE	
	D2461	RGP10J-5025-T3	SI.DIODE	
	D2462	1SS133-T2	SI.DIODE	
	D2463	1SS133-T2	SI.DIODE	
	D2501	1SS81-T5	SI.DIODE	
	D2521	V11CA-C1	SI.DIODE	
	D2522	FMV-3FU-F1	SI.DIODE	
	D2523	MTZJ22B-T2	ZENER DIODE	
	D2524	1SR35-400A-T2	SI.DIODE	
	D2525	RGP10J-5025-T3	SI.DIODE	
	D2541	RGP10J-5025-T3	SI.DIODE	
	D2542	MTZJ3.9B-T2	ZENER DIODE	
	D2551	RGP10J-5025-T3	SI.DIODE	
	D2552	RGP10J-5025-T3	SI.DIODE	
	D2553	RH1S-T3	SI.DIODE	

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⚠	Symbol No.	Part No.	Part Name	Description
	DIODE			
	D2582	MTZJ7.5B-T2	ZENER DIODE	
	D2583	MTZJ7.5S-T2	ZENER DIODE	
⚠	D2584	RGP10J-5025-T3	SI.DIODE	
	D2901	D3SB60	BRIDGE DIODE	
	D2902	RG1C-LFA1	SI.DIODE	
	D2904	EU2A-T2	SI.DIODE	
	D2905	1SS133-T2	SI.DIODE	
	D2906	MTZJ27B-T2	ZENER DIODE	
	D2907	1SS133-T2	SI.DIODE	
	D2908	1SS133-T2	SI.DIODE	
	D2910	MTZJ15B-T2	ZENER DIODE	
	D2911	1SS133-T2	SI.DIODE	
⚠	D2931	S1WB/A/60-4101	SI.DIODE	
	D2945	1SS133-T2	SI.DIODE	
	D2951	RU4AM-LFT2	SI.DIODE	
	D2952	RGP10J-5025-T3	SI.DIODE	
	D2953	RU4AM-LFT2	SI.DIODE	
	D2955	RU3YX-LFC4	SI.DIODE	
	D2956	RGP10J-5025-T3	SI.DIODE	
	D2958	MTZJ33B-T2	ZENER DIODE	
	D2959	RU3YX-LFC4	SI.DIODE	
	D2960	1SR124-400A-T2	SI.DIODE	
	D2961	1SS133-T2	SI.DIODE	
	D2981	1SS133-T2	SI.DIODE	
	D2984	1SS133-T2	SI.DIODE	
	D2985	1SS133-T2	SI.DIODE	
	TRANSISTOR			
	Q2421	DTC124ESA-T	DIGI.TRANSISTOR	
	Q2422	2SC1740S/QR/-T	SI.TRANSISTOR	
	Q2461	2SK2459N-F54	F.E.T.	
	Q2462-63	2SC1740S/QR/-T	SI.TRANSISTOR	
	Q2464	2SA933AS/QR/-T	SI.TRANSISTOR	
	Q2501	BSN304-T	F.E.T.	
⚠	Q2521	2SC5552-RL	SI.TRANSISTOR	H.OUT
	Q2581	2SA1208/ST/Z1-T	SI.TRANSISTOR	
	Q2582	DTC144ESA-T	DIGI.TRANSISTOR	
	Q2583	2SC1740S/QR/-T	SI.TRANSISTOR	
	Q2941-42	2SC1740S/QR/-T	SI.TRANSISTOR	
	IC			
	IC2401	AN5523	I.C(M)	
	IC2461	BA10393	I.C(MONO-ANA)	
	IC2551	BA12T	I.C(MONO-ANA)	
	IC2901	STR-F6667B/F7	I.C(HYBRID)	
⚠	IC2902	QAL0425-001	P.W.B.MODULE	
	IC2951	SE140N	I.C(HYBRID)	
	IC2954	BA05T	I.C(MONO-ANA)	
	IC2955	PQ3RD13	I.C(MONO-ANA)	
	OTHERS			
	CN2004-06	QGB1506M1-16	CONNECTOR	
	CN2010	QGA2501C5-04Z	W TO B CONNE	
	CN2014	QGA2501C5-06Z	EH POST HEADER	
⚠	CP2951	ICP-N75-Y	I.C.PROTECT	
⚠	CP2952	ICP-N75-Y	I.C.PROTECT	
⚠	CP2953	ICP-N75-Y	I.C.PROTECT	
⚠	CP2955	ICP-N75-Y	I.C.PROTECT	
	K2401	QQR0621-002Z	BEADS CORE	
	K2522-24	CE41832-001	LEAD CORE	
	K2901	QQR0679-001	FERRITE BEADS	
⚠	LF2901	QQR1095-001	LINE FILTER	
⚠	PC2901	PC123FY2	I.C(PH.COUPLER)	
⚠	RY2931	QSK0099-001	RELAY	
⚠	TH2901	QAD0133-9R0	P.THEMISTOR	

■CRT SOCKET P.W. BOARD ASS'Y

(SMF-3401A-U2)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R3101	NRSA63J-223X	MG R	22kΩ 1/16W J
	R3102	NRSA63J-681X	MG R	680Ω 1/16W J
	R3103	NRSA63J-101X	MG R	100Ω 1/16W J
	R3104	NRSA63J-822X	MG R	8.2kΩ 1/16W J
	R3105	NRSA63J-102X	MG R	1kΩ 1/16W J
	R3106	NRSA63J-221X	MG R	220Ω 1/16W J
	R3107	NRSA63J-561X	MG R	560Ω 1/16W J
	R3109	NRSA63J-153X	MG R	15kΩ 1/16W J
	R3110	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R3111	NRSA63J-182X	MG R	1.8kΩ 1/16W J
	R3112	NRSA63J-272X	MG R	2.7kΩ 1/16W J
	R3113	NRSA63J-331X	MG R	330Ω 1/16W J
	R3114	NRSA63J-152X	MG R	1.5kΩ 1/16W J
	R3115	NRSA63J-820X	MG R	82Ω 1/16W J
	R3116	QRG01GJ-101	OM R	100Ω 1W J
	R3117	NRSA63J-221X	MG R	220Ω 1/16W J
	R3122	NRSA63J-122X	MG R	1.2kΩ 1/16W J
	R3123	QRE121J-563Y	C R	56kΩ 1/2W J
	R3124	NRSA63J-470X	MG R	47Ω 1/16W J
	R3125	QRE121J-563Y	C R	56kΩ 1/2W J
	R3126	NRSA63J-470X	MG R	47Ω 1/16W J
	R3127	NRSA63J-122X	MG R	1.2kΩ 1/16W J
	R3128	NRSA63J-390X	MG R	39Ω 1/16W J
	R3129-30	QRE121J-2R7Y	C R	2.7Ω 1/2W J
	R3131	NRSA63J-390X	MG R	39Ω 1/16W J
	R3132	NRSA63J-121X	MG R	120Ω 1/16W J
	R3133	QRL029J-391	OM R	390Ω 2W J
⚠	R3134	QRZ9021-561	F R	560Ω 1W J
	R3204-06	NRSA63J-272X	MG R	2.7kΩ 1/16W J
	R3211	NRSA63J-154X	MG R	150kΩ 1/16W J
	R3223-25	NRSA63J-272X	MG R	2.7kΩ 1/16W J
	R3227	NRSA63J-103X	MG R	10kΩ 1/16W J
	R3228	NRSA63J-272X	MG R	2.7kΩ 1/16W J
	R3229-31	QRL029J-104-F	OM R	100kΩ 2W J
	R3232-34	NRSA63J-332X	MG R	3.3kΩ 1/16W J
	R3235-37	QRC121K-152Z	COMP.R	1.5kΩ 1/2W K
	R3239	QRZ0107-474Z	C R	470kΩ 1/2W K
	R3240	QRC121K-102Z	MF R	1kΩ 1/2W K
	R3241	QRZ0107-105Z	C R	1.0MΩ 1/2W K
	R3242	NRSA63J-103X	MG R	10kΩ 1/16W J
	R3244	NRSA63J-102X	MG R	1kΩ 1/16W J
	R3245-47	NRSA63J-562X	MG R	5.6kΩ 1/16W J
	R3301-02	QRE121J-474Y	C R	470kΩ 1/2W J
	R3303-04	NRSA63J-223X	MG R	22kΩ 1/16W J
	R3305	NRSA63J-562X	MG R	5.6kΩ 1/16W J
	R3306	NRSA63J-392X	MG R	3.9kΩ 1/16W J
	R3310	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	CAPACITOR			
	C3102	NDC31HJ-8R0X	C CAP.	8.0pF 50V J
	C3103	NDC31HJ-151X	C CAP.	150pF 50V J
	C3104	QCB31HK-103Z	C CAP.	0.01μF 50V K
	C3106	QETN1HM-335Z	E CAP.	3.3μF 50V M
	C3107	QETN1CM-107Z	E CAP.	100μF 16V M
	C3110	QETN2CM-106Z	E CAP.	10μF 160V M
	C3111	QCB32HK-472Z	C CAP.	4700pF 500V K
	C3113	QETN2CM-106Z	E CAP.	10μF 160V M
	C3114	QCB32HK-472Z	C CAP.	4700pF 500V K
	C3116-17	QETN1AM-107Z	E CAP.	100μF 10V M
	C3118	QETN1AM-337Z	E CAP.	330μF 10V M
	C3120-21	NDC31HJ-221X	C CAP.	220pF 50V J
	C3201-03	NDC31HJ-8R0X	C CAP.	8.0pF 50V J
	C3204-06	NCF31CZ-104X	C CAP.	0.1μF 16V Z
	C3207-09	QETN1EM-476Z	E CAP.	47μF 25V M
	C3210-12	QFK62EK-104Z	MM CAP.	0.1μF 250V K

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⚠	Symbol No.	Part No.	Part Name	Description
	CAPACITOR			
	C3213-15	NDC31HJ-181X	C CAP.	180pF 50V J
	C3216	QETN1CM-107Z	E CAP.	100µF 16V M
	C3218	QETM2EM-336	E CAP.	33µF 250V M
	C3219	QFZ0097-223	MM CAP.	0.022µF 1250V K
	C3221	QETN2EM-106Z	E CAP.	10µF 250V M
	C3302	QETN1AM-107Z	E CAP.	100µF 10V M
	COIL			
	L3101	QQL244K-5R6Z	COIL	5.6µH K
	L3204	QQL26AJ-102Z	COIL	1mH J
	DIODE			
	D3101-02	MA111-X	SI.DIODE	
	D3103	RH1S-T3	SI.DIODE	
	D3104	RH1S-T3	SI.DIODE	
	D3204-06	EU01N-T2	SI.DIODE	
	D3207	RM2C-LFA1	SI.DIODE	
	D3208-10	1SR124-400A-T2	SI.DIODE	
	D3211	MA3062/M/-X	ZENER DIODE	
	D3212-13	MA3130/H/-X	ZENER DIODE	
	D3301	MA111-X	SI.DIODE	
	D3303	MA111-X	SI.DIODE	
	TRANSISTOR			
	Q3101	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q3102	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q3103	2SC1906-T	SI.TRANSISTOR	
	Q3104	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q3105	2SC1627A/OY/-T	SI.TRANSISTOR	
	Q3108	2SA1837	SI.TRANSISTOR	
	Q3109	2SC4793	SI.TRANSISTOR	
	Q3301	2SA1037AK/QR/-X	SI.TRANSISTOR	
	IC			
	IC3201-03	TDA6111Q	I.C(MONO-ANA)	
	OTHERS			
	K3101	CE41492-001Z	CHOKE COIL	
	K3103-04	CE41492-001Z	CHOKE COIL	
	K3105	QQR0621-002Z	BEADS CORE	
	SG3201-03	QAF0056-501Z	VARISTOR	
⚠	SK3001	QNZ0380-001	C.R.T.SOCKET	
	W3003	QQR0679-001	FERRITE BEADS	
	W3022	QQR0679-001	FERRITE BEADS	

■ FRONT CONTROL P.W. BOARD ASS'Y

(SMF-8401A-U2)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R8001-02	QRE121J-271Y	C R	270Ω 1/2W J
	R8005	NRSA63J-221X	MG R	220Ω 1/16W J
	R8008	NRSA63J-102X	MG R	1kΩ 1/16W J
	R8010	NRSA63J-103X	MG R	10kΩ 1/16W J
	R8012-13	NRSA63J-103X	MG R	10kΩ 1/16W J
	R8021-22	NRSA63J-102X	MG R	1kΩ 1/16W J
	R8035	QRE121J-151Y	C R	150Ω 1/2W J
	R8039	NRSA63J-331X	MG R	330Ω 1/16W J
	CAPACITOR			
	C8001-02	NCB31HK-103X	C CAP.	0.01µF 50V K
	C8004	NCB31CK-104X	C CAP.	0.1µF 16V K
	C8005	NDC31HJ-680X	C CAP.	68pF 50V J
	C8010-11	NCB31HK-472X	C CAP.	4700pF 50V K
	C8019	QETN1CM-107Z	E CAP.	100µF 16V M
	C8021	NCB31CK-104X	C CAP.	0.1µF 16V K
	C8022	QETN1EM-476Z	E CAP.	47µF 25V M
⚠	C8901	QFZ9072-474	MF CAP.	0.47µFAC275V K
	COIL			
	L8001	QQR0716-001Z	LEAD CORE	
	L8002-03	QQL244K-5R6Z	COIL	5.6µH K
	L8010-11	QQL244K-270Z	PEAKING COIL	
	L8012	QQR0716-001Z	LEAD CORE	
	DIODE			
	D8010	SPR-39MVWF	L.E.D.	
	D8011	MA111-X	SI.DIODE	
	D8014	MA3068/M/-X	ZENER DIODE	
	D8018	MA3033-X	ZENER DIODE	
	TRANSISTOR			
	Q8002	DTC124EKA-X	DIGI.TRANSISTOR	
	Q8003-04	DTA124EKA-X	DIGI.TRANSISTOR	
	IC			
	IC8001	GP1U281Q	IFR DETECT UNIT	
	OTHERS			
		CEMG002-001Z	FUSE CLIP	
		LC30596-001B-C	L.E.D.HOLDER	
⚠	F8901	QMF51D2-3R15J1	FUSE	3.15A
	LC8002	NQR0169-001X	EMI FILTER	
⚠	LF8901	QQR1095-001	LINE FILTER	
	J8001	QMS3004-C01	HEADPHONE JACK	
	J8003	QNZ0453-001	JACK	
	S8001	QSW0619-003Z	PUSH SWITCH	MENU
	S8002	QSW0619-003Z	PUSH SWITCH	CH DOWN
	S8003	QSW0619-003Z	PUSH SWITCH	CH UP
⚠	S8901	QSW0824-001	PUSH SWITCH	MAIN POWER

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■MICOM P.W. BOARD ASS'Y (SMF0M401A-U2)

⚠	Symbol No.	Part No.	Part Name	Description
RESISTOR				
	R0001	NRSA63J-102X	MG R	1kΩ 1/16W J
	R0002	NRSA63J-104X	MG R	100kΩ 1/16W J
	R0003-05	NRSA63J-102X	MG R	1kΩ 1/16W J
	R0006	NRSA63J-152X	MG R	1.5kΩ 1/16W J
	R0007-08	NRSA63J-102X	MG R	1kΩ 1/16W J
	R0009-11	NRSA63J-103X	MG R	10kΩ 1/16W J
	R0012	NRSA63J-273X	MG R	27kΩ 1/16W J
	R0013	NRSA63J-221X	MG R	220Ω 1/16W J
	R0014	NRSA63J-102X	MG R	1kΩ 1/16W J
	R0015	NRSA63J-473X	MG R	47kΩ 1/16W J
	R0016-17	NRSA63J-103X	MG R	10kΩ 1/16W J
	R0018	NRSA63J-102X	MG R	1kΩ 1/16W J
	R0022	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R0027	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R0030	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R0032	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R0034-53	NRSA63J-0ROX	MG R	0.0Ω 1/16W J
	R0055	NRSA63J-0ROX	MG R	0.0Ω 1/16W J
	R0057-77	NRSA63J-0ROX	MG R	0.0Ω 1/16W J
	R0081	NCF31CZ-104X	C CAP.	0.1μF 16V Z
	R0087	NRSA63J-221X	MG R	220Ω 1/16W J
	R0089-91	NRSA63J-221X	MG R	220Ω 1/16W J
	R0092	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R0093	NRSA63J-221X	MG R	220Ω 1/16W J
	R0094	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R0095	NRSA63J-473X	MG R	47kΩ 1/16W J
	R0096	NRSA63J-221X	MG R	220Ω 1/16W J
	R0097	NRSA63J-102X	MG R	1kΩ 1/16W J
	R0098	NRSA63J-0ROX	MG R	0.0Ω 1/16W J
	R0099	NRSA63J-102X	MG R	1kΩ 1/16W J
	R0100-02	NRSA63J-102X	MG R	1kΩ 1/16W J
	R0103-06	NRSA63J-103X	MG R	10kΩ 1/16W J
	R0107	NRSA63J-102X	MG R	1kΩ 1/16W J
	R0110	NRSA63J-102X	MG R	1kΩ 1/16W J
	R0111	NRSA63J-103X	MG R	10kΩ 1/16W J
	R0112	NRSA63J-102X	MG R	1kΩ 1/16W J
	R0113-14	NRSA63J-103X	MG R	10kΩ 1/16W J
	R0119	NRSA63J-563X	MG R	56kΩ 1/16W J
	R0120	NRSA63J-332X	MG R	3.3kΩ 1/16W J
	R0121	NRSA63J-182X	MG R	1.8kΩ 1/16W J
	R0122	NRSA63J-103X	MG R	10kΩ 1/16W J
	R0123	NRSA63J-682X	MG R	6.8kΩ 1/16W J
	R0124	NRSA63J-101X	MG R	100Ω 1/16W J
	R0125-28	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R0129	NRSA63J-823X	MG R	82kΩ 1/16W J
	R0130	NRSA63J-104X	MG R	100kΩ 1/16W J
	R0131	NRSA63J-0ROX	MG R	0.0Ω 1/16W J
	R0133	NRSA63J-0ROX	MG R	0.0Ω 1/16W J
	R0136	NRSA63J-103X	MG R	10kΩ 1/16W J
	R0137-39	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R0144	NRSA63J-103X	MG R	10kΩ 1/16W J
	R0147	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R0151	NRSA63J-183X	MG R	18kΩ 1/16W J
	R0152-54	NRSA63J-221X	MG R	220Ω 1/16W J
	R0155-56	NRSA63J-101X	MG R	100Ω 1/16W J
	R0157	NRSA63J-0ROX	MG R	0.0Ω 1/16W J
	R0158	NRSA63J-221X	MG R	220Ω 1/16W J
	R0165	NRSA63J-103X	MG R	10kΩ 1/16W J
	R0166	NRSA63J-223X	MG R	22kΩ 1/16W J
	R0167	NRSA63J-103X	MG R	10kΩ 1/16W J
	R0168	NRSA63J-471X	MG R	470Ω 1/16W J
	R0169	NRSA63J-472X	MG R	4.7kΩ 1/16W J
CAPACITOR				
	C0001	QETNOJM-477Z	E CAP.	470μF 6.3V M

⚠	Symbol No.	Part No.	Part Name	Description
CAPACITOR				
	C0002	NCF31CZ-104X	C CAP.	0.1μF 16V Z
	C0003	NCB11CK-225X	C CAP.	2.2μF 16V K
	C0004	QETNOJM-108Z	E CAP.	1000μF 6.3V M
	C0005-06	NCB11CK-225X	C CAP.	2.2μF 16V K
	C0007	NEH71CM-476X	E CAP.	47μF 16V M
	C0012-13	NCF31CZ-104X	C CAP.	0.1μF 16V Z
	C0014	NCB31HK-682X	C CAP.	6800pF 50V K
	C0017	NDC31HJ-150X	C CAP.	15pF 50V J
	C0019	NEH71CM-476X	E CAP.	47μF 16V M
	C0020	NCF31CZ-104X	C CAP.	0.1μF 16V Z
	C0021	NEH71CM-476X	E CAP.	47μF 16V M
	C0022	NCF31AZ-105X	C CAP.	1μF 10V Z
	C0023	NCB31EK-333X	C CAP.	0.033μF 25V K
	C0024	NCF31CZ-104X	C CAP.	0.1μF 16V Z
	C0027-28	NEH71CM-476X	E CAP.	47μF 16V M
	C0029	NDC31HJ-151X	C CAP.	150pF 50V J
	C0030-32	NCF31CZ-104X	C CAP.	0.1μF 16V Z
	C0034-39	NCF31CZ-104X	C CAP.	0.1μF 16V Z
	C0040	NDC31HJ-330X	C CAP.	33pF 50V J
	C0041	NDC31HJ-270X	C CAP.	27pF 50V J
	C0042-43	NCF31CZ-104X	C CAP.	0.1μF 16V Z
	C0045-47	NCF31CZ-104X	C CAP.	0.1μF 16V Z
	C0048	NEH71CM-476X	E CAP.	47μF 16V M
	C0049-50	NCF31CZ-104X	C CAP.	0.1μF 16V Z
	C0051	NEH71CM-476X	E CAP.	47μF 16V M
	C0052-57	NCF31CZ-104X	C CAP.	0.1μF 16V Z
	C0059-61	NEH71CM-106X	E CAP.	10μF 16V M
	C0062	NRSA63J-0ROX	MG R	0.0Ω 1/16W J
	C0063-65	NDC31HJ-820X	C CAP.	82pF 50V J
COIL				
	L0001	NQL092K-4R7X	INDUCTOR	
	L0003	NQL092K-4R7X	INDUCTOR	
	L0005-08	NQL092K-4R7X	INDUCTOR	
	L0009	NQL034K-4R7X	INDUCTOR	
	L0010-14	NQL092K-4R7X	INDUCTOR	
	L0015-16	NQL034K-4R7X	INDUCTOR	
	L0017-22	NQL092K-1R5X	INDUCTOR	
DIODE				
	D0001-02	MA111-X	SI.DIODE	
	D0003	MA3068/M/-X	ZENER DIODE	
	D0004	MA3027-X	ZENER DIODE	
	D0005-08	MA3056/M/-X	ZENER DIODE	
TRANSISTOR				
	Q0001-02	2SC2712/YG/-X	SI.TRANSISTOR	
	Q0007-08	2SA1162/YG/-X	SI.TRANSISTOR	
	Q0009-12	2SC2712/YG/-X	SI.TRANSISTOR	
	Q0021-22	2SC2712/YG/-X	SI.TRANSISTOR	
IC				
	IC0001	SDA6000	I.C(M)	
	IC0002	MR27V1652EB6RAZ	I.C(M)	
	IC0003	K4S161622D-TC80	I.C(D-RAM)	
	IC0004	AT24LC-28H28EU	I.C	(SERVICE)
	IC0005	S-80828CNNB-W	I.C(M)	
	IC0901	BA33C25FP-X	I.C(M)	
OTHERS				
	CN0001	QGB1505K1-50	CONNECTOR	
	K0001	NRSA63J-390X	MG R	39Ω 1/16W J
	K0002	NQR0389-003X	FERRITE BEADS	
	K0003	NRSA63J-0ROX	MG R	0.0Ω 1/16W J
	K0004	NQR0389-003X	FERRITE BEADS	
	K0005	NRSA63J-0ROX	MG R	0.0Ω 1/16W J
	LC0001	NQR0313-007X	EMI FILTER	
	LC0002	NQR0431-001X	EMI FILTER	
	X0001	QAX0669-001Z	CRYSTAL	

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■ AV SW P.W. BOARD ASS'Y (SMF0S401A-U2)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R0101-09	NRSA63J-750X	MG R	75Ω 1/16W J
	R0110-11	NRSA63J-103X	MG R	10kΩ 1/16W J
	R0112-13	NRSA63J-823X	MG R	82kΩ 1/16W J
	R0114	NRSA63J-333X	MG R	33kΩ 1/16W J
	R0115	NRSA63J-473X	MG R	47kΩ 1/16W J
	R0116	NRSA63J-823X	MG R	82kΩ 1/16W J
	R0117	NRSA63J-223X	MG R	22kΩ 1/16W J
	R0118	NRSA63J-473X	MG R	47kΩ 1/16W J
	R0119	NRSA63J-153X	MG R	15kΩ 1/16W J
	R0120	NRSA63J-273X	MG R	27kΩ 1/16W J
	R0121	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R0122	NRSA63J-473X	MG R	47kΩ 1/16W J
	R0123	NRSA63J-823X	MG R	82kΩ 1/16W J
	R0124	NRSA63J-153X	MG R	15kΩ 1/16W J
	R0125	NRSA63J-223X	MG R	22kΩ 1/16W J
	R0126	NRSA63J-473X	MG R	47kΩ 1/16W J
	R0127	NRSA63J-273X	MG R	27kΩ 1/16W J
	R0128-29	NRSA63J-823X	MG R	82kΩ 1/16W J
	R0130-31	NRSA63J-391X	MG R	390Ω 1/16W J
	R0132	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R0133	NRSA63J-333X	MG R	33kΩ 1/16W J
	R0134	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R0135	NRSA63J-333X	MG R	33kΩ 1/16W J
	R0136	NRSA63J-103X	MG R	10kΩ 1/16W J
	R0137	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R0138-39	NRSA63J-333X	MG R	33kΩ 1/16W J
	R0140	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R0141	NRSA63J-333X	MG R	33kΩ 1/16W J
	R0142	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R0143-44	NRSA63J-333X	MG R	33kΩ 1/16W J
	R0145	NRSA63J-103X	MG R	10kΩ 1/16W J
	R0146	NRSA63J-473X	MG R	47kΩ 1/16W J
	R0147	NRSA63J-223X	MG R	22kΩ 1/16W J
	R0148-49	NRSA63J-391X	MG R	390Ω 1/16W J
	R0150-51	NRSA63J-104X	MG R	100kΩ 1/16W J
	R0152-67	NRSA63J-101X	MG R	100Ω 1/16W J
	R0168	NRSA63J-750X	MG R	75Ω 1/16W J
	R0169	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R0170	NRSA63J-333X	MG R	33kΩ 1/16W J
	R0171	NRSA63J-750X	MG R	75Ω 1/16W J
	R0172	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R0173	NRSA63J-333X	MG R	33kΩ 1/16W J
	R0174	NRSA63J-750X	MG R	75Ω 1/16W J
	R0175	NRSA63J-333X	MG R	33kΩ 1/16W J
	R0176	NRSA63J-103X	MG R	10kΩ 1/16W J
	R0177	NRSA63J-823X	MG R	82kΩ 1/16W J
	R0178	NRSA63J-153X	MG R	15kΩ 1/16W J
	R0179	NRSA63J-473X	MG R	47kΩ 1/16W J
	R0180	NRSA63J-273X	MG R	27kΩ 1/16W J
	R0181-82	NRSA63J-562X	MG R	5.6kΩ 1/16W J
	R0183-84	NRSA63J-102X	MG R	1kΩ 1/16W J
	R0185-90	NRSA63J-101X	MG R	100Ω 1/16W J
	R0191	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R0192	NRSA63J-101X	MG R	100Ω 1/16W J
	R0194-95	NRSA63J-221X	MG R	220Ω 1/16W J
	R0196	QRG01GJ-101	OM R	100Ω 1W J
	R0197	QRK126J-181X	C R	180Ω 1/2W J
	R0198	NRSA63J-750X	MG R	75Ω 1/16W J
	R0199	NRSA63J-101X	MG R	100Ω 1/16W J
	R0200	NRSA63J-750X	MG R	75Ω 1/16W J
	R0201	QRK126J-151X	C R	150Ω 1/2W J
	R0203-05	NRSA63J-750X	MG R	75Ω 1/16W J
	CAPACITOR			
	C0101-10	NCB31HK-472X	C CAP.	4700pF 50V K

⚠	Symbol No.	Part No.	Part Name	Description
	CAPACITOR			
	C0111-12	QETN1CM-477Z	E CAP.	470μF 16V M
	C0113-14	NCB31HK-102X	C CAP.	1000pF 50V K
	C0115-17	QETN1HM-106Z	E CAP.	10μF 50V M
	C0118-19	QETN1HM-105Z	E CAP.	1μF 50V M
	C0120	NCB31HK-103X	C CAP.	0.01μF 50V K
	C0121	QETN1HM-105Z	E CAP.	1μF 50V M
	C0122	QETN1HM-106Z	E CAP.	10μF 50V M
	C0123	QETN1HM-105Z	E CAP.	1μF 50V M
	C0124	NCB31HK-103X	C CAP.	0.01μF 50V K
	C0125	NCB31HK-102X	C CAP.	1000pF 50V K
	C0126-28	QETN1HM-106Z	E CAP.	10μF 50V M
	C0129	QETN1HM-105Z	E CAP.	1μF 50V M
	C0130	NCB31HK-103X	C CAP.	0.01μF 50V K
	C0131	QETN1HM-105Z	E CAP.	1μF 50V M
	C0132	NCB31HK-103X	C CAP.	0.01μF 50V K
	C0133	QETN1HM-106Z	E CAP.	10μF 50V M
	C0134	QETN1HM-105Z	E CAP.	1μF 50V M
	C0135	QETN1HM-106Z	E CAP.	10μF 50V M
	C0136	QETN1HM-105Z	E CAP.	1μF 50V M
	C0137	NCB31HK-103X	C CAP.	0.01μF 50V K
	C0138-39	QENC1HM-105Z	E CAP.	1μF 50V M
	C0140	QENC1EM-106Z	BP E CAP.	10μF 25V M
	C0141-47	NCB31HK-103X	C CAP.	0.01μF 50V K
	C0148	QETN1HM-106Z	E CAP.	10μF 50V M
	C0149	QENC1EM-106Z	BP E CAP.	10μF 25V M
	C0150-51	QETN1CM-107Z	E CAP.	100μF 16V M
	C0152	QETN1CM-477Z	E CAP.	470μF 16V M
	C0153	NCB31HK-103X	C CAP.	0.01μF 50V K
	C0154	QETN1CM-107Z	E CAP.	100μF 16V M
	C0155	NDC31HJ-150X	C CAP.	15pF 50V J
	COIL			
	L0101	QQR0716-001Z	LEAD CORE	
	DIODE			
	D0101-04	MA3056/M/-X	ZENER DIODE	
	D0109-13	MA3120/M/-X	ZENER DIODE	
	D0114	MA3039/H/-X	ZENER DIODE	
	D0115-17	MA3056/M/-X	ZENER DIODE	
	TRANSISTOR			
	Q0101-02	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q0103-05	DTC323TK-X	DIGI.TRANSISTOR	
	Q0106-09	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q0110	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q0111	DTC323TK-X	DIGI.TRANSISTOR	
	Q0112	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q0113-15	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q0116	2SA933AS/QR/-T	SI.TRANSISTOR	
	Q0117	2SC1740S/QR/-T	SI.TRANSISTOR	
	IC			
	IC0101	CXA2069Q	I.C(MONO-ANA)	
	OTHERS			
	CN0001	QGB1505K1-50	CONNECTOR	
	J0001	QNZ0465-001	PIN CONNECTOR	
	J0002	QNZ0463-001	PIN CONNECTOR	
	K0101-04	CE42681-001Y	BEADS CORE	

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■100Hz P.W. BOARD ASS'Y (SMF0Z405A-U2)

⚠	Symbol No.	Part No.	Part Name	Description
RESISTOR				
	R0008-09	NRSA63J-0ROX	MG R	0.0Ω 1/16W J
	R0010-12	NRSA63J-101X	MG R	100Ω 1/16W J
	R0101	NRSA63J-332X	MG R	3.3kΩ 1/16W J
	R0102-03	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R0104	NRSA63J-332X	MG R	3.3kΩ 1/16W J
	R0105-06	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R0107-13	NRSA63J-750X	MG R	75Ω 1/16W J
	R0122-23	NRSA63J-0ROX	MG R	0.0Ω 1/16W J
	R0124-25	NRSA63J-101X	MG R	100Ω 1/16W J
	R0132-39	NRSA63J-100X	MG R	10Ω 1/16W J
	R0141	NRSA63J-100X	MG R	10Ω 1/16W J
	R0201	NRSA63J-121X	MG R	120Ω 1/16W J
	R0202-03	NRSA63J-101X	MG R	100Ω 1/16W J
	R0204-05	NRSA63J-0ROX	MG R	0.0Ω 1/16W J
	R0214	NRSA63J-0ROX	MG R	0.0Ω 1/16W J
	R0217	NRSA63J-103X	MG R	10kΩ 1/16W J
	R0218	NRSA63J-333X	MG R	33kΩ 1/16W J
	R0219	NRSA63J-103X	MG R	10kΩ 1/16W J
	R0220	NRSA63J-822X	MG R	8.2kΩ 1/16W J
	R0226-42	NRSA63J-0ROX	MG R	0.0Ω 1/16W J
	R0243-44	NRSA63J-103X	MG R	10kΩ 1/16W J
	R0251	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R0252	NRSA63J-750X	MG R	75Ω 1/16W J
	R0254	NRSA63J-391X	MG R	390Ω 1/16W J
	R0255-56	NRSA63J-221X	MG R	220Ω 1/16W J
	R0257	NRSA63J-271X	MG R	270Ω 1/16W J
	R0258	NRSA63J-272X	MG R	2.7kΩ 1/16W J
	R0259	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R0261	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R0264	NRSA63J-391X	MG R	390Ω 1/16W J
	R0271	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R0274	NRSA63J-391X	MG R	390Ω 1/16W J
	R0401	NRSA63J-473X	MG R	47kΩ 1/16W J
	R0402	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R0404	NRSA63J-0ROX	MG R	0.0Ω 1/16W J
	R0407	NRSA63J-0ROX	MG R	0.0Ω 1/16W J
	R0409	NRSA63J-0ROX	MG R	0.0Ω 1/16W J
CAPACITOR				
	C0001	NCB31CK-104X	C CAP.	0.1μF 16V K
	C0002	NEH71CM-476X	E CAP.	47μF 16V M
	C0003	NCB31CK-104X	C CAP.	0.1μF 16V K
	C0004	NEH71CM-476X	E CAP.	47μF 16V M
	C0005	NCB31CK-104X	C CAP.	0.1μF 16V K
	C0006	NEH71CM-476X	E CAP.	47μF 16V M
	C0007-09	NDC31HJ-4ROX	C CAP.	4.0pF 50V J
	C0101	NEH71CM-106X	E CAP.	10μF 16V M
	C0102	NCB31EK-473X	C CAP.	0.047μF 25V K
	C0103	NEH71CM-476X	E CAP.	47μF 16V M
	C0104	NCB31HK-152X	C CAP.	1500pF 50V K
	C0105	NDC31HJ-102X	C CAP.	1000pF 50V J
	C0106	NCB31CK-104X	C CAP.	0.1μF 16V K
	C0107	NCF31CZ-224X	C CAP.	0.22μF 16V Z
	C0108	NCB31HK-152X	C CAP.	1500pF 50V K
	C0109	NDC31HJ-391X	C CAP.	390pF 50V J
	C0110	NEH71CM-106X	E CAP.	10μF 16V M
	C0111	NCB31EK-473X	C CAP.	0.047μF 25V K
	C0112	NDC31HJ-331X	C CAP.	330pF 50V J
	C0113-18	NCF31CZ-224X	C CAP.	0.22μF 16V Z
	C0119-24	NDC31HJ-331X	C CAP.	330pF 50V J
	C0125-26	NDC31HJ-3ROX	C CAP.	3.0pF 50V J
	C0128	NCB31CK-104X	C CAP.	0.1μF 16V K
	C0129	NCF31CZ-224X	C CAP.	0.22μF 16V Z
	C0130	NDC31HJ-391X	C CAP.	390pF 50V J

⚠	Symbol No.	Part No.	Part Name	Description
CAPACITOR				
	C0131	NCB31HK-152X	C CAP.	1500pF 50V K
	C0132	NCB31EK-473X	C CAP.	0.047μF 25V K
	C0133	NCB31HK-152X	C CAP.	1500pF 50V K
	C0134	NCB31CK-683X	CHIP CAP.	0.068μF 16V K
	C0136-37	NCB31CK-683X	CHIP CAP.	0.068μF 16V K
	C0138	NCB31HK-152X	C CAP.	1500pF 50V K
	C0139	NCB31EK-473X	C CAP.	0.047μF 25V K
	C0140	NEH71CM-476X	E CAP.	47μF 16V M
	C0141	NDC31HJ-100X	C CAP.	10pF 50V J
	C0201	NEH71CM-476X	E CAP.	47μF 16V M
	C0202-05	NCB31CK-104X	C CAP.	0.1μF 16V K
	C0206	NEH71CM-476X	E CAP.	47μF 16V M
	C0207-11	NCB31CK-104X	C CAP.	0.1μF 16V K
	C0212-13	NDC31HJ-180X	C CAP.	18pF 50V J
	C0214-17	NCB31CK-104X	C CAP.	0.1μF 16V K
	C0218	NDC31HJ-561X	C CAP.	560pF 50V J
	C0237-38	NEH71CM-106X	E CAP.	10μF 16V M
	C0251	NDC31HJ-4ROX	C CAP.	4.0pF 50V J
	C0252	NCB31CK-104X	C CAP.	0.1μF 16V K
	C0254	NDC31HJ-120X	C CAP.	12pF 50V J
	C0255	NDC31HJ-270X	C CAP.	27pF 50V J
	C0256	NEH71CM-106X	E CAP.	10μF 16V M
	C0261	NDC31HJ-4ROX	C CAP.	4.0pF 50V J
	C0262	NCB31CK-104X	C CAP.	0.1μF 16V K
	C0264	NDC31HJ-120X	C CAP.	12pF 50V J
	C0265	NDC31HJ-270X	C CAP.	27pF 50V J
	C0271	NDC31HJ-4ROX	C CAP.	4.0pF 50V J
	C0272	NCB31CK-104X	C CAP.	0.1μF 16V K
	C0274	NDC31HJ-120X	C CAP.	12pF 50V J
	C0275	NDC31HJ-270X	C CAP.	27pF 50V J
	C0402-03	NCB31CK-104X	C CAP.	0.1μF 16V K
	C0404	NDC31HJ-330X	C CAP.	33pF 50V J
COIL				
	L0001-03	NQL092K-1R5X	INDUCTOR	
	L0101	NQL034K-150X	INDUCTOR	
	L0102-08	NQL092K-3R3X	INDUCTOR	
	L0109	NQL034K-6R8X	INDUCTOR	
	L0201-03	NQL034K-100X	INDUCTOR	
	L0209-10	NQL092K-1R5X	INDUCTOR	
	L0251	NQL092K-5R6X	INDUCTOR	
	L0261	NQL092K-5R6X	INDUCTOR	
	L0271	NQL092K-5R6X	INDUCTOR	
DIODE				
	D0401	MA111-X	SI.DIODE	
TRANSISTOR				
	Q0101-02	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q0201	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q0251-52	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q0253	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q0261	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q0271	2SA1037AK/QR/-X	SI.TRANSISTOR	
IC				
	IC0101	VPC3230D-QA-B3	I.C(M)	
	IC0201	SAA4979H/V105	I.C(M)	
	IC0401	S-80828CNNB-W	I.C(M)	
	IC0402	TC7WH34FU-X	I.C(DIGI-MOS)	
OTHERS				
	CN0003	QGB1505K1-50	CONNECTOR	
	LC0010-12	NQR0313-009X	EMI FILTER	
	LC0013	NQR0313-004X	EMI FILTER	
	LC0014-15	NQR0313-007X	EMI FILTER	
	X0101	QAX0655-001Z	CRYSTAL	
	X0201	QAX0273-001Z	CRYSTAL	

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EXPLODED VIEW PARTS LIST

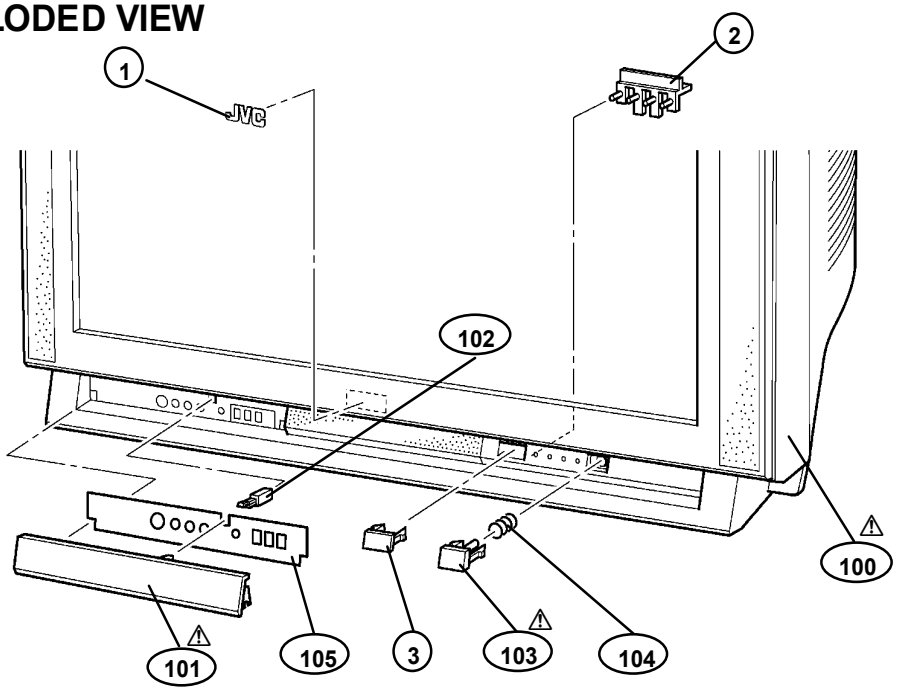
AV28H20EUS

⚠	Ref.No.	Part No.	Part Name	Description
	1	LC40354-003A-C	JVC MARK	
	2	LC30580-001C-C	LED LENS	
	3	LC30579-001B-C	REMOCON WINDOW	
⚠	100	LC10662-023A-U	FRONT CABINET ASSY	Inc.No.101～105
⚠	101	LC20265-017A-U	DOOR	(SERVICE)
	102	CM48229-00A-C	DOOR LATCH	
⚠	103	LC30578-007B-U	POWER KNOB	(SERVICE)
	104	AEM3149-001-E	SPRING	
	105	LC31109-006A-U	CONTROL SHEET	

AV28H20EUB

⚠	Ref.No.	Part No.	Part Name	Description
	1	LC40354-001C-C	JVC MARK	
	2	LC30580-001C-C	LED LENS	
	3	LC30579-001B-C	REMOCON WINDOW	
⚠	100	LC10662-024A-U	FRONT CABINET ASSY	Inc.No.101～105
⚠	101	LC20265-024A-U	DOOR	(SERVICE)
	102	CM48229-00A-C	DOOR LATCH	
⚠	103	LC30578-004A-U	POWER KNOB	(SERVICE)
	104	AEM3149-001-E	SPRING	
	105	LC31109-004B-U	CONTROL SHEET	

EXPLODED VIEW



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AV28H20EUS

⚠	Ref.No.	Part No.	Part Name	Description
⚠	V01	W66QDE993X925	ITC TUBE(C)	Inc.DY,PC MAGNET,WEDGE
⚠	L01	QQW0100-001	DEGAUSSING COIL	
⚠	T2551	QQH0126-001	H.V.TRANSF.	
	4	WJY0001-011A	BRAIDED ASSY	
	5	WJY0013-002A	BRAIDED SUB ASSY	
	6	CHFD125-11BD	FFC WIRE	CN-1
⚠	7	LC10716-002F-U	CHASSIS BASE	
⚠	8	LC10717-005D-U	TERMINAL BOARD	
	9	QYSBSB3012M	TAPPING SCREW	(x3)
⚠	10	LC10380-003B-U	CONTROL BASE L	
⚠	11	LC10380-004B-U	CONTROL BASE R	
	12	QAS0088-001	SPEAKER	SP01-02(x2)
⚠	13	LC10720-001D-U	ADAPTER	(x2)
	14	LC40226-003A-H	SPACER	(x4)
	15	LC40506-001A	TAPPING SCREW	(x4)
⚠	16	LC10664-003B-U	REAR COVER	
	17	QYSBSAG4016N	TAPPING SCREW	(x12)
⚠	18	QMPK160-185-JC	POWER CORD	CN-PW
⚠	19	CM46618-A01-E	POWER CORD CLAMP	
⚠	20	LC20379-026A-U	RATING LABEL	
⚠	21	LC30789-002B-U	WARNING LABEL	
⚠	22	QQR0491-001	FILTER	

AV28H20EUB

⚠	Ref.No.	Part No.	Part Name	Description
⚠	V01	W66QDE993X925	ITC TUBE(C)	Inc.DY,PC MAGNET,WEDGE
⚠	L01	QQW0100-001	DEGAUSSING COIL	
⚠	T2551	QQH0126-001	H.V.TRANSF.	
	4	WJY0001-011A	BRAIDED ASSY	
	5	WJY0013-002A	BRAIDED SUB ASSY	
	6	CHFD125-11BD	FFC WIRE	CN-1
⚠	7	LC10716-002F-U	CHASSIS BASE	
⚠	8	LC10717-003E-U	TERMINAL BOARD	
	9	QYSBSB3012M	TAPPING SCREW	(x3)
⚠	10	LC10380-003B-U	CONTROL BASE L	
⚠	11	LC10380-004B-U	CONTROL BASE R	
	12	QAS0088-001	SPEAKER	SP01-02(x2)
⚠	13	LC10720-001D-U	ADAPTER	(x2)
	14	LC40226-003A-H	SPACER	(x4)
	15	LC40506-001A	TAPPING SCREW	(x4)
⚠	16	LC10664-001E-U	REAR COVER	
	17	QYSBSAG4016N	TAPPING SCREW	(x12)
⚠	18	QMPK160-185-JC	POWER CORD	CN-PW
⚠	19	CM46618-A01-E	POWER CORD CLAMP	
⚠	20	LC20379-025A-U	RATING LABEL	
⚠	21	LC30789-002B-U	WARNING LABEL	
⚠	22	QQR0491-001	FILTER	

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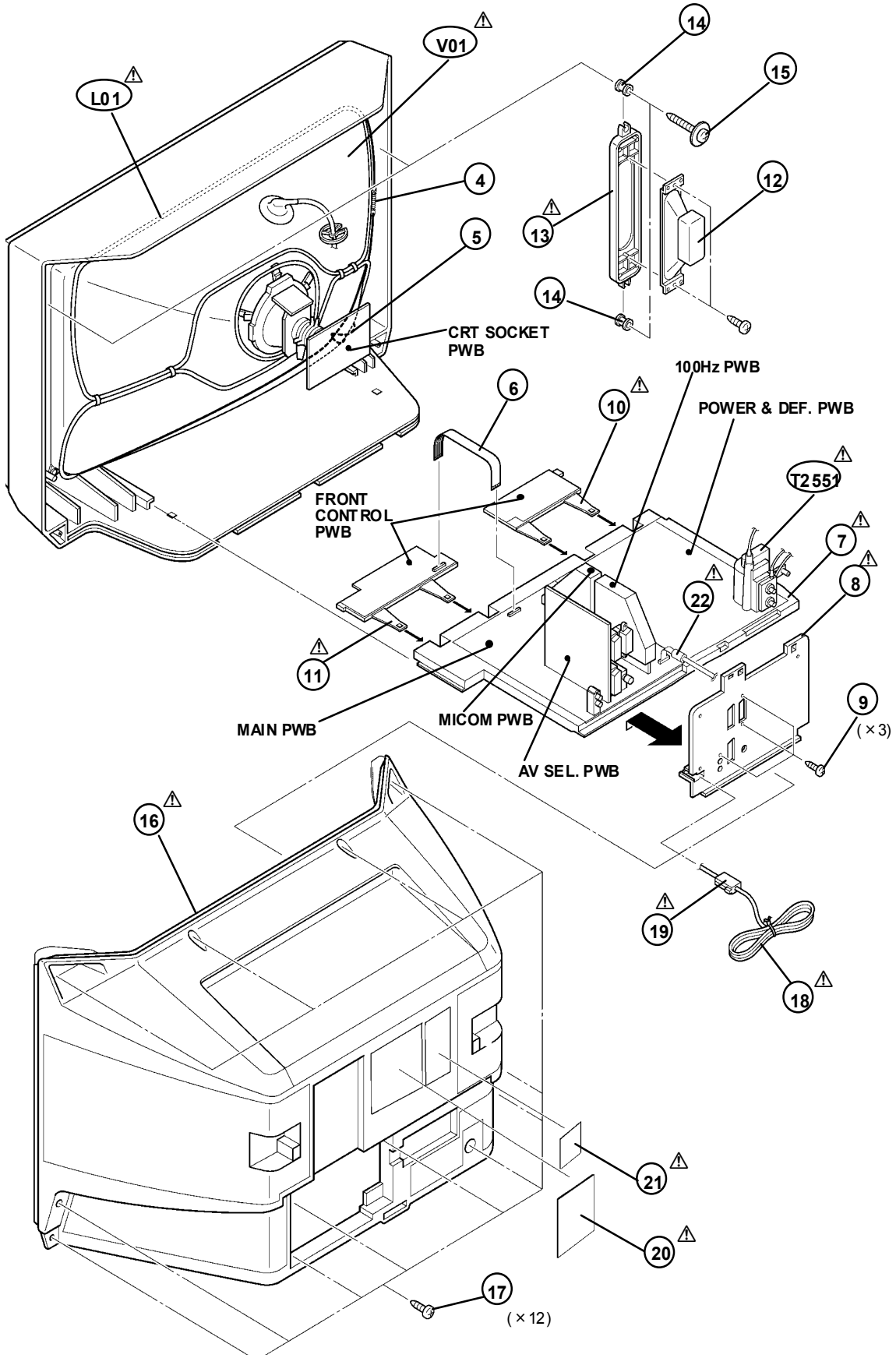
EXPLODED VIEW



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PRINTED WIRING BOARD PARTS LIST

■ MAIN P.W. BOARD ASS'Y (SMF-1402A-U2)

⚠ Symbol No.	Part No.	Part Name	Description
RESISTOR			
R1004-06	NRSA63J-101X	MG R	100Ω 1/16W J
R1008-09	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
R1102	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
R1103	NRSA63J-222X	MG R	2.2kΩ 1/16W J
R1104	NRSA63J-102X	MG R	1kΩ 1/16W J
R1105	NRSA63J-561X	MG R	560Ω 1/16W J
R1106	NRSA63J-331X	MG R	330Ω 1/16W J
R1108	NRSA63J-102X	MG R	1kΩ 1/16W J
R1109-11	NRSA63J-101X	MG R	100Ω 1/16W J
R1151	NRSA63J-101X	MG R	100Ω 1/16W J
R1153	NRSA63J-101X	MG R	100Ω 1/16W J
R1156	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
R1158-59	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
R1161	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
R1301-02	NRSA63J-101X	MG R	100Ω 1/16W J
R1303	NRSA63J-273X	MG R	27kΩ 1/16W J
R1304	NRSA63J-102X	MG R	1kΩ 1/16W J
R1311	NRSA63J-331X	MG R	330Ω 1/16W J
R1312	NRSA63J-273X	MG R	27kΩ 1/16W J
R1313	NRSA63J-183X	MG R	18kΩ 1/16W J
R1314	NRSA63J-221X	MG R	220Ω 1/16W J
R1315-17	NRSA63J-101X	MG R	100Ω 1/16W J
R1318	NRSA63J-562X	MG R	5.6kΩ 1/16W J
R1319	NRSA63J-183X	MG R	18kΩ 1/16W J
R1321-22	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
R1325	NRSA63J-101X	MG R	100Ω 1/16W J
R1326	NRSA63J-682X	MG R	6.8kΩ 1/16W J
R1401-02	NRSA63J-102X	MG R	1kΩ 1/16W J
R1403-04	NRSA63J-331X	MG R	330Ω 1/16W J
R1405-06	NRSA63J-102X	MG R	1kΩ 1/16W J
R1451	NRSA63J-821X	MG R	820Ω 1/16W J
R1454	NRSA63J-472X	MG R	4.7kΩ 1/16W J
R1455-56	NRSA63J-123X	MG R	12kΩ 1/16W J
R1457	NRSA63J-392X	MG R	3.9kΩ 1/16W J
R1458	NRSA63J-123X	MG R	12kΩ 1/16W J
R1459	NRSA63J-472X	MG R	4.7kΩ 1/16W J
R1461	NRSA63J-123X	MG R	12kΩ 1/16W J
R1462	NRSA63J-153X	MG R	15kΩ 1/16W J
R1463	NRSA63J-104X	MG R	100kΩ 1/16W J
R1465-66	NRSA63J-224X	MG R	220kΩ 1/16W J
R1467	NRSA63J-563X	MG R	56kΩ 1/16W J
R1468	NRSA63J-224X	MG R	220kΩ 1/16W J
R1469	NRSA63J-683X	MG R	68kΩ 1/16W J
R1470	NRSA63J-223X	MG R	22kΩ 1/16W J
R1471	NRSA63J-273X	MG R	27kΩ 1/16W J
R1472	NRSA63J-682X	MG R	6.8kΩ 1/16W J
R1473	NRSA63J-123X	MG R	12kΩ 1/16W J
R1474	NRSA63J-563X	MG R	56kΩ 1/16W J
R1475	NRSA63J-153X	MG R	15kΩ 1/16W J
R1476-78	NRSA63J-123X	MG R	12kΩ 1/16W J
R1479	NRSA63J-154X	MG R	150kΩ 1/16W J
R1480	NRSA63J-823X	MG R	82kΩ 1/16W J
R1481	NRSA63J-472X	MG R	4.7kΩ 1/16W J
R1482	NRSA63J-272X	MG R	2.7kΩ 1/16W J
R1483	NRSA63J-472X	MG R	4.7kΩ 1/16W J
R1484	NRSA63J-473X	MG R	47kΩ 1/16W J
R1485	NRSA63J-123X	MG R	12kΩ 1/16W J
R1486	NRSA63J-472X	MG R	4.7kΩ 1/16W J
R1487	NRSA63J-183X	MG R	18kΩ 1/16W J
R1489	NRSA63J-333X	MG R	33kΩ 1/16W J
R1491	NRSA63J-332X	MG R	3.3kΩ 1/16W J
R1492	NRSA63J-562X	MG R	5.6kΩ 1/16W J
R1501	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
R1504	NRSA63J-102X	MG R	1kΩ 1/16W J

⚠ Symbol No.	Part No.	Part Name	Description
RESISTOR			
R1511	NRSA63J-152X	MG R	1.5kΩ 1/16W J
R1512	NRSA63J-332X	MG R	3.3kΩ 1/16W J
R1521	NRSA63J-223X	MG R	22kΩ 1/16W J
R1522	NRSA63J-562X	MG R	5.6kΩ 1/16W J
R1551	NRSA63J-100X	MG R	10Ω 1/16W J
R1552	NRSA63J-124X	MG R	120kΩ 1/16W J
R1553	NRSA63J-683X	MG R	68kΩ 1/16W J
R1554	NRSA63J-562X	MG R	5.6kΩ 1/16W J
R1555	NRSA63J-333X	MG R	33kΩ 1/16W J
R1556	NRSA63J-472X	MG R	4.7kΩ 1/16W J
R1557	NRSA63J-562X	MG R	5.6kΩ 1/16W J
R1558	NRSA63J-104X	MG R	100kΩ 1/16W J
R1559	NRSA63J-154X	MG R	150kΩ 1/16W J
R1560	NRSA63J-100X	MG R	10Ω 1/16W J
R1561	QRN143J-0R0X	C R	0.0Ω 1/4W J
R1562	NRSA63J-683X	MG R	68kΩ 1/16W J
R1563	NRSA63J-103X	MG R	10kΩ 1/16W J
R1564	NRSA63J-223X	MG R	22kΩ 1/16W J
R1565	NRSA63J-562X	MG R	5.6kΩ 1/16W J
R1591	NRSA63J-561X	MG R	560Ω 1/16W J
R1592	NRSA63J-332X	MG R	3.3kΩ 1/16W J
R1595	NRSA63J-222X	MG R	2.2kΩ 1/16W J
R1596	NRSA63J-104X	MG R	100kΩ 1/16W J
R1601	NRSA63J-273X	MG R	27kΩ 1/16W J
R1602	NRSA63J-103X	MG R	10kΩ 1/16W J
R1603	NRSA63J-273X	MG R	27kΩ 1/16W J
R1604	NRSA63J-103X	MG R	10kΩ 1/16W J
R1605	NRSA63J-473X	MG R	47kΩ 1/16W J
R1606	NRSA63J-273X	MG R	27kΩ 1/16W J
R1609	NRSA63J-104X	MG R	100kΩ 1/16W J
R1610	NRSA63J-682X	MG R	6.8kΩ 1/16W J
R1618	NRSA63J-333X	MG R	33kΩ 1/16W J
R1619	NRSA63J-104X	MG R	100kΩ 1/16W J
R1620	NRSA63J-562X	MG R	5.6kΩ 1/16W J
R1637	QRK126J-2R2X	C R	2.2Ω 1/2W J
R1639	NRSA63J-561X	MG R	560Ω 1/16W J
R1642-43	NRSA63J-681X	MG R	680Ω 1/16W J
R1644	NRSA63J-104X	MG R	100kΩ 1/16W J
R1645-46	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
R1649	QRK126J-2R2X	C R	2.2Ω 1/2W J
R1650-51	NRSA63J-103X	MG R	10kΩ 1/16W J
R1654-55	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
R1664-65	NRSA63J-103X	MG R	10kΩ 1/16W J
R1666	NRSA63J-473X	MG R	47kΩ 1/16W J
R1667	NRSA63J-183X	MG R	18kΩ 1/16W J
R1668	NRSA63J-473X	MG R	47kΩ 1/16W J
R1669	NRSA63J-183X	MG R	18kΩ 1/16W J
R1670-71	NRSA63J-104X	MG R	100kΩ 1/16W J
R1672	NRSA63J-223X	MG R	22kΩ 1/16W J
R1673	NRSA63J-273X	MG R	27kΩ 1/16W J
R1675	NRSA63J-103X	MG R	10kΩ 1/16W J
R1677-78	NRSA63J-103X	MG R	10kΩ 1/16W J
R1679	NRSA63J-223X	MG R	22kΩ 1/16W J
R1680	NRSA63J-273X	MG R	27kΩ 1/16W J
R1684	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
R1687	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
R1701-02	NRSA63J-103X	MG R	10kΩ 1/16W J
R1703-04	NRSA63J-102X	MG R	1kΩ 1/16W J
R1705-08	NRSA63J-103X	MG R	10kΩ 1/16W J
R1711-12	NRSA63J-101X	MG R	100Ω 1/16W J
R1714-15	NRSA63J-102X	MG R	1kΩ 1/16W J
R1720-22	NRSA63J-102X	MG R	1kΩ 1/16W J
R1772-76	NRSA63J-221X	MG R	220Ω 1/16W J
R1951	QRK126J-220X	C R	22Ω 1/2W J

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⚠	Symbol No.	Part No.	Part Name	Description
	CAPACITOR			
	C1001	NCB31HK-222X	C CAP.	2200pF 50V K
	C1002	QETN1HM-106Z	E CAP.	10μF 50V M
	C1004	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1005	QETN1CM-108Z	E CAP.	1000μF 16V M
	C1006	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1007	QETN1HM-106Z	E CAP.	10μF 50V M
	C1009	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1010	QETN1HM-106Z	E CAP.	10μF 50V M
	C1101	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1102	QETN1HM-106Z	E CAP.	10μF 50V M
	C1103	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1104	QETN1CM-107Z	E CAP.	100μF 16V M
	C1105	QETN1HM-106Z	E CAP.	10μF 50V M
	C1106-07	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1108	NDC31HJ-680X	C CAP.	68pF 50V J
	C1111	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1116	NCB31HK-472X	C CAP.	4700pF 50V K
	C1117-18	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1119-20	NDC31HJ-2R0X	C CAP.	2.0pF 50V J
	C1121	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1122-23	NDC31HJ-102X	C CAP.	1000pF 50V J
	C1124-25	QETN1HM-106Z	E CAP.	10μF 50V M
	C1126	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1127	QETN1HM-106Z	E CAP.	10μF 50V M
	C1128	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1129	NCF31AZ-105X	C CAP.	1μF 10V Z
	C1130	QETN1HM-106Z	E CAP.	10μF 50V M
	C1151-54	NCF31AZ-105X	C CAP.	1μF 10V Z
	C1155-56	NDC31HJ-102X	C CAP.	1000pF 50V J
	C1301	QETN1CM-107Z	E CAP.	100μF 16V M
	C1302-03	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1305-09	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1310	QETN1AM-228Z	E CAP.	2200μF 10V M
	C1311	NCB31CK-683X	CHIP CAP.	0.068μF 16V K
	C1312	NDC31HJ-221X	C CAP.	220pF 50V J
	C1313-15	NCB31HK-223X	C CAP.	0.022μF 50V K
	C1316-18	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1320	QETN0JM-228Z	E CAP.	2200μF 6.3V M
	C1321-23	NCB31HK-223X	C CAP.	0.022μF 50V K
	C1324	NDC31HJ-820X	C CAP.	82pF 50V J
	C1351	QENC1EM-106Z	BP E CAP.	10μF 25V M
	C1401	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1402	QETN1CM-107Z	E CAP.	100μF 16V M
	C1403-04	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1453	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1454	NCB31EK-333X	C CAP.	0.033μF 25V K
	C1455-56	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1457	NCB31EK-333X	C CAP.	0.033μF 25V K
	C1471	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1472	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1473	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1474	NCB31EK-333X	C CAP.	0.033μF 25V K
	C1475	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1491	NCB31EK-473X	C CAP.	0.047μF 25V K
	C1501-02	NDC31HJ-150X	C CAP.	15pF 50V J
	C1551-52	NCF31CZ-224X	C CAP.	0.22μF 16V Z
	C1553	QETN1EM-476Z	E CAP.	47μF 25V M
	C1554-55	NCF31CZ-224X	C CAP.	0.22μF 16V Z
	C1560	QETN1CM-107Z	E CAP.	100μF 16V M
	C1561	NDC31HJ-561X	C CAP.	560pF 50V J
	C1562	QETN1HM-105Z	E CAP.	1μF 50V M
	C1564	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1591	NDC31HJ-471X	C CAP.	470pF 50V J

⚠	Symbol No.	Part No.	Part Name	Description
	CAPACITOR			
	C1596	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1600	QETN1HM-226Z	E CAP.	22μF 50V M
	C1606-07	QETN1CM-227Z	E CAP.	220μF 16V M
	C1616	QETN1HM-105Z	E CAP.	1μF 50V M
	C1618	QETN1HM-105Z	E CAP.	1μF 50V M
	C1628	QETN1HM-107Z	E CAP.	100μF 50V M
	C1629	QETN1HM-106Z	E CAP.	10μF 50V M
	C1630	NCF21HZ-224X	C CAP.	0.22μF 50V Z
	C1632	NCF21HZ-224X	C CAP.	0.22μF 50V Z
	C1634	QETM1HM-228	E CAP.	2200μF 50V M
	C1641-42	NCF21HZ-224X	C CAP.	0.22μF 50V Z
	C1646-47	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1648-49	QETM1VM-108	E CAP.	1000μF 35V M
	C1673-74	NCF31AZ-105X	C CAP.	1μF 10V Z
	C1675	QETN1EM-476Z	E CAP.	47μF 25V M
	C1676-77	NDC31HJ-151X	C CAP.	150pF 50V J
	C1678-79	NDC31HJ-150X	C CAP.	15pF 50V J
	C1680	NCF31AZ-105X	C CAP.	1μF 10V Z
	C1681	NCB31HK-332X	C CAP.	3300pF 50V K
	C1682	NCB31EK-333X	C CAP.	0.033μF 25V K
	C1683	QETN1EM-476Z	E CAP.	47μF 25V M
	C1684	NCB31HK-332X	C CAP.	3300pF 50V K
	C1685	NCB31EK-333X	C CAP.	0.033μF 25V K
	C1686	NCF31AZ-105X	C CAP.	1μF 10V Z
	C1687	QETN1HM-106Z	E CAP.	10μF 50V M
	C1688	QETN1EM-476Z	E CAP.	47μF 25V M
	C1689	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1695	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	C1698	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	C1699	NCB31HK-103X	C CAP.	0.01μF 50V K
	C1701	QETN1HM-106Z	E CAP.	10μF 50V M
	C1702	NCB31CK-563X	CHIP CAP.	0.056μF 16V K
	C1951	QETN1CM-477Z	E CAP.	470μF 16V M
	C1952-53	NCB31CK-104X	C CAP.	0.1μF 16V K
	C1954	QETN1AM-477Z	E CAP.	470μF 10V M
	C1955	QETN1AM-227Z	E CAP.	220μF 10V M
	C1956	QETN1AM-107Z	E CAP.	100μF 10V M
	COIL			
	L1001	QQL244K-270Z	PEAKING COIL	
	L1002-03	QQL244K-100Z	COIL	10μH K
	L1101	QRN143J-0R0X	C R	0.0Ω 1/4W J
	L1102	QQL244K-4R7Z	COIL	4.7μH K
	L1301-02	NQL092K-1R5X	INDUCTOR	
	L1951	QQL26AM-5R6Z	CHOKE COIL	
	DIODE			
	D1317-18	MA111-X	SI.DIODE	
	D1319	MA3036-X	ZENER DIODE	
	D1320-21	MA3056/M/-X	ZENER DIODE	
	D1471-74	MA111-X	SI.DIODE	
	D1475	MA3240/M/-X	CHIP ZENER DIODE	
	D1521	MA111-X	SI.DIODE	
	D1591	MA111-X	SI.DIODE	
	D1592	MA3051/M/-X	ZENER DIODE	
	D1593	MA111-X	SI.DIODE	
	D1602	MA111-X	SI.DIODE	
	D1610-11	MA111-X	SI.DIODE	
	D1614-15	MA111-X	SI.DIODE	
	D1617	MA111-X	SI.DIODE	
	D1619-20	MA3330/L/-X	ZENER DIODE	
	D1771-74	MA3056/M/-X	ZENER DIODE	
	D1951	1SR35-400A-T2	SI.DIODE	
	D1981-82	MA111-X	SI.DIODE	

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⚠	Symbol No.	Part No.	Part Name	Description
	TRANSISTOR			
	Q1101-02	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1301	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q1471-72	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1561	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1562	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q1591	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q1592	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1601-02	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q1604-05	DTC124EKA-X	DIGI.TRANSISTOR	
	Q1606	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1607	DTA124EKA-X	DIGI.TRANSISTOR	
	Q1615	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q1616-17	DTC323TK-X	DIGI.TRANSISTOR	
	IC			
	IC1101	MSP3415DQGB3GHX	I.C(MONO-ANA)	
	IC1301	SDA9380	I.C(M)	
	IC1402	BA10324AF-XE	I.C(MONO-ANA)	
	IC1471	BA10358F-XE	I.C(M)	
	IC1551	LA6515	I.C(MONO-ANA)	
	IC1601	TA8246AH	I.C(HYBRID)	
	IC1662	BA4558F-X	I.C(MONO-ANA)	
	IC1663	NJM2150AM-X	I.C(MONO-ANA)	
	IC1701	JLC1562BF-X	I.C(DIGI-MOS)	
	IC1951	BA09T	I.C(MONO-ANA)	
	IC1952	BA08T	I.C(MONO-ANA)	
	OTHERS			
	CN1013	QGA2501C1-10	W TO B CONNE	
	J1001	QNN0296-001	PIN JACK	
	K1001	NQR0389-003X	FERRITE BEADS	
	K1101-02	NQR0389-003X	FERRITE BEADS	
	K1301	NQR0413-003X	BEADS CORE	
	K1601-02	CE42681-001Y	BEADS CORE	
	LC1102	NQR0431-001X	EMI FILTER	
	LC1301-03	NQR0431-001X	EMI FILTER	
	TU1001	QAU0276-001	TUNER	
	X1101	CE42546-001Z	CRYSTAL	
	X1501	QAX0549-001Z	CRYSTAL	
	Y1612-13	NCF21CZ-105X	C CAP.	1µF 16V Z

■POWER & DEF. P.W. BOARD ASS'Y (SMF-2402A-U2)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R2401-02	QRE141J-562Y	C R	5.6kΩ 1/4W J
	R2403	QRE141J-222Y	C R	2.2kΩ 1/4W J
	R2404	QRX01GJ-1R0	MF R	1.0Ω 1W J
	R2405	QRL029J-151	OM R	150Ω 2W J
	R2406	QRE141J-222Y	C R	2.2kΩ 1/4W J
	R2407-08	QRX01GJ-1R5	MF R	1.5Ω 1W J
	R2409	QRE141J-823Y	C R	82kΩ 1/4W J
	R2410	QRE141J-103Y	C R	10kΩ 1/4W J
	R2421	QRE141J-103Y	C R	10kΩ 1/4W J
	R2422	QRE141J-274Y	C R	270kΩ 1/4W J
	R2461	QRG029J-820	OM R	82 Ω 2W J
	R2462	QRE141J-473Y	C R	47kΩ 1/4W J
	R2463	QRA14CF-9101Y	MF R	9.1kΩ 1/4W F
	R2464	QRX01GJ-2R7	MF R	2.7Ω 1W J
	R2468	QRE141J-102Y	C R	1kΩ 1/4W J
	R2469	QRE141J-272Y	C R	2.7kΩ 1/4W J
	R2471	QRE141J-391Y	C R	390Ω 1/4W J
	R2472	QRA14CF-1002Y	MF R	10kΩ 1/4W F
	R2473	QRE141J-473Y	C R	47kΩ 1/4W J
	R2474	QRE141J-103Y	C R	10kΩ 1/4W J
	R2475	QRE141J-102Y	C R	1kΩ 1/4W J
	R2476	QRE141J-102Y	C R	1kΩ 1/4W J
	R2477	QRE141J-563Y	C R	56kΩ 1/4W J
	R2478	QRE141J-333Y	C R	33kΩ 1/4W J
	R2501	QRE141J-471Y	C R	470Ω 1/4W J
	R2502	QRE141J-123Y	C R	12kΩ 1/4W J
	R2503	QRE121J-152Y	C R	1.5kΩ 1/2W J
	R2504	QRL039J-272	OM R	2.7kΩ 3W J
	R2505	QRL039J-332	OM R	3.3kΩ 3W J
	R2506	QRE121J-5R6Y	C R	5.6Ω 1/2W J
	R2521	QRE121J-471Y	C R	470Ω 1/2W J
	R2522	QRE141J-223Y	C R	22kΩ 1/4W J
	R2523	QRE141J-103Y	C R	10kΩ 1/4W J
	R2524	QRC121K-152Z	COMP.R	1.5kΩ 1/2W K
	R2525	QRL039J-103	OM R	10kΩ 3W J
	R2541	QRE141J-182Y	C R	1.8kΩ 1/4W J
	R2542	QRE141J-222Y	C R	2.2kΩ 1/4W J
	R2543	QRE121J-272Y	C R	2.7kΩ 1/2W J
⚠	R2551	QRZ9022-R47	F R	0.47 Ω 1W K
⚠	R2552	QRZ9022-R47	F R	0.47 Ω 1W K
	R2581	QRF154K-4R7	UNF R	4.7Ω 15W K
	R2582	QRE141J-681Y	C R	680Ω 1/4W J
	R2583	QRE121J-682Y	C R	6.8kΩ 1/2W J
	R2584	QRE141J-183Y	C R	18kΩ 1/4W J
	R2585	QRE141J-222Y	C R	2.2kΩ 1/4W J
	R2586	QRA14CF-7501Y	MF R	7.5kΩ 1/4W F
	R2587	QRA14CF-2101Y	MF R	2.1kΩ 1/4W F
	R2588	QRE141J-103Y	C R	10kΩ 1/4W J
⚠	R2591	QRZ9017-4R7	F R	4.7 Ω 1/4W J
	R2901	QRE121J-331Y	C R	330Ω 1/2W J
	R2902	QRF054K-3R3	UNF R	3.3Ω 5W K
	R2903	QRF104K-3R9	UNF R	3.9Ω 10W K
	R2904	QRL039J-683	OM R	68kΩ 3W J
	R2905-06	QRE121J-474Y	C R	470kΩ 1/2W J
	R2908-09	QRL039J-823	OM R	82kΩ 3W J
⚠	R2910	QRZ9017-100	F R	10 Ω 1/4W K
	R2911	QRE121J-152Y	C R	1.5kΩ 1/2W J
	R2914	QRM059J-R10	MP R	0.10Ω 5W J
	R2915	QRE121J-681Y	C R	680Ω 1/2W J
	R2916	QRE121J-332Y	C R	3.3kΩ 1/2W J
	R2931	QRE141J-1R0Y	C R	1.0Ω 1/4W J
	R2932	QRE141J-1R5Y	C R	1.5Ω 1/4W J
	R2933	QRE141J-1R8Y	C R	1.8Ω 1/4W J
	R2944	QRE141J-103Y	C R	10kΩ 1/4W J

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⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R2945	QRE141J-563Y	C R	56kΩ 1/4W J
	R2946	QRE141J-103Y	C R	10kΩ 1/4W J
	R2951	QRE121J-102Y	C R	1kΩ 1/2W J
	R2952	QRL039J-223	OM R	22kΩ 3W J
	R2953	QRE141J-474Y	C R	470kΩ 1/4W J
	R2954	QRE141J-103Y	C R	10kΩ 1/4W J
	R2981	QRE141J-153Y	C R	15kΩ 1/4W J
	R2982	QRE141J-102Y	C R	1kΩ 1/4W J
⚠	R2991	QRZ9046-825Z	C R	8.2MΩ 1/2W K
	CAPACITOR			
	C2404	QCZ0120-104Z	C CAP.	0.1μF 25V Z
	C2405	QDC31HJ-820Z	C CAP.	82pF 50V J
	C2406	QETM1VM-108	E CAP.	1000μF 35V M
	C2408	QETN1VM-337Z	E CAP.	330μF 35V M
	C2409-10	QFV71HJ-474Z	MF CAP.	0.47μF 50V J
	C2411	QFLC2AJ-104Z	M CAP.	0.1μF 100V J
	C2414	QCB31HK-682Z	C CAP.	6800pF 50V K
	C2421	QETN1HM-105Z	E CAP.	1μF 50V M
	C2461	QEZ0414-226	E CAP.	22μF 50V M
	C2462-63	QFM72DJ-152Z	M CAP.	1500pF 200V J
	C2464	QCZ0120-104Z	C CAP.	0.1μF 25V Z
	C2465	QETN1HM-106Z	E CAP.	10μF 50V M
	C2466	QFP31HJ-272Z	PP CAP.	2700pF 50V J
	C2467	QFLC1HJ-102Z	M CAP.	1000pF 50V J
	C2468	QETN1EM-476Z	E CAP.	47μF 25V M
	C2470	QCS31HJ-470Z	C CAP.	47pF 50V J
	C2471	QFLC1HJ-103Z	M CAP.	0.01μF 50V J
	C2501	QCB32HK-331Z	C CAP.	330pF 500V K
	C2502	QFM72DK-103	M CAP.	0.01μF 200V K
	C2503	QFV71HJ-224Z	MF CAP.	0.22μF 50V J
⚠	C2521	QFZ0122-112	MPP CAP.	1100pF 1.8kVH±3%
⚠	C2522	QFZ0200-113	MPP CAP.	0.011μF 1.5kVH±3%
	C2523	QFM72DK-393	M CAP.	0.039μF 200V K
⚠	C2524	QFP32JJ-223	PP CAP.	0.022μF 630V J
	C2526	QFZ0197-184	MPP CAP.	0.18μF 250V J
	C2527	QFZ0197-124	MPP CAP.	0.12μF 250V J
	C2529	QFZ0197-154	MPP CAP.	0.15μF 250V J
	C2530	QCB32HK-561Z	C CAP.	560pF 500V K
	C2531	QFZ0194-534	MPP CAP.	0.53μF 250V J
	C2532	QETM2CM-227	E CAP.	220μF 160V M
	C2533	QETN2EM-475Z	E CAP.	4.7μF 250V M
	C2541	QENC1HM-105Z	E CAP.	1μF 50V M
	C2551	QCB32HK-152Z	C CAP.	1500pF 500V K
	C2552	QETN1CM-108Z	E CAP.	1000μF 16V M
	C2553	QCB32HK-152Z	C CAP.	1500pF 500V K
	C2554	QETN1CM-108Z	E CAP.	1000μF 16V M
	C2555	QCB32HK-102Z	C CAP.	1000pF 500V K
	C2556	QETN2EM-106Z	E CAP.	10μF 250V M
	C2558	QETN1CM-477Z	E CAP.	470μF 16V M
	C2559	QEHR1CM-227Z	E CAP.	220μF 16V M
	C2581	QETN1CM-107Z	E CAP.	100μF 16V M
	C2582	QETN1EM-476Z	E CAP.	47μF 25V M
	C2583	QETN2AM-106Z	E CAP.	10μF 100V M
	C2584	QETN1AM-227Z	E CAP.	220μF 10V M
⚠	C2901	QFZ9072-473	MM CAP.	0.047μFAC275V K
⚠	C2902	QFZ9072-104	MF CAP.	0.1μFAC275V K
⚠	C2903	QFZ9072-473	MM CAP.	0.047μFAC275V K
	C2904	QCZ9054-472	C CAP.	4700pFAC250V Z
	C2905	QCZ9054-472	C CAP.	4700pFAC250V Z
	C2906	QCZ9054-472	C CAP.	4700pFAC250V Z
	C2907	QEZ0199-227	E CAP.	220μF 400V M
	C2908	QCB32HK-103	C CAP.	0.01μF 500V K

⚠	Symbol No.	Part No.	Part Name	Description
	CAPACITOR			
	C2909	QCZ0340-391	C CAP.	390pF 2kV K
	C2910	QETN1HM-476Z	E CAP.	47μF 50V M
	C2911	QCB31HK-102Z	C CAP.	1000pF 50V K
	C2912	QCZ0340-561	C CAP.	560pF 2kV K
	C2914	QCB31HK-471Z	C CAP.	470pF 50V K
	C2915	QFLC1HJ-104Z	M CAP.	0.1μF 50V J
	C2916	QCB32HK-152Z	C CAP.	1500pF 500V K
⚠	C2931	QCZ9054-472	C CAP.	4700pFAC250V Z
⚠	C2932	QCZ9054-472	C CAP.	4700pFAC250V Z
⚠	C2933	QCZ9054-472	C CAP.	4700pFAC250V Z
	C2934	QETM2GM-226	E CAP.	22μF 400V M
	C2941	QTMN1CM-477Z	E CAP.	470μF 16V M
	C2942	QETN1AM-337Z	E CAP.	330μF 10V M
	C2951	QEZ0203-227	E CAP.	220μF 160V M
	C2952	QETN1CM-108Z	E CAP.	1000μF 16V M
	C2955	QETM1VM-228	E CAP.	2200μF 35V M
	C2956	QETN1AM-108Z	E CAP.	1000μF 10V M
	C2957	QETN1AM-228Z	E CAP.	2200μF 10V M
	C2959	QFV71HJ-684Z	MF CAP.	0.68μF 50V J
	C2960	QCZ0325-821	C CAP.	820pF 2kV K
	C2972-73	QETN1AM-477Z	E CAP.	470μF 10V M
	C2974	QETN0JM-228Z	E CAP.	2200μF 6.3V M
	C2975	QETN1AM-228Z	E CAP.	2200μF 10V M
⚠	C2991	QCZ9079-222	C CAP.	2200pFAC250V M
⚠	C2993	QCZ9079-471	C CAP.	470pFAC250V K
	TRANSFORMER			
	T2501	QQR1111-001	DRIVE TRANSF	
⚠	T2551	QQH0126-001	H.V.TRANSF.	
⚠	T2901	QQS0156-001	SWITCH.TRANSF.	
	COIL			
	L2461	QQR1195-001	CHOKE COIL	
	L2462	QQLZ028-272	CHOKE COIL	
	L2521	QQLZ031-180	CHOKE COIL	
	L2522	QQR1191-002	LINEARITY COIL	
	L2551	QQLZ026-540	HEATER CHOKE	
	L2552	QQL26AK-220Z	COIL	22μH K
	L2901-02	QQL401K-100Z	CHOKE COIL	
	L2903	QQR1200-001	CHOKE COIL	
	L2951	QQLZ026-460	HEATER CHOKE	
	L2959-60	QQL26AK-220Z	COIL	22μH K
	L2961	QQL26AM-4R7Z	CHOKE COIL	
	DIODE			
	D2402	1SR35-400A-T2	SI.DIODE	
	D2421	1SS133-T2	SI.DIODE	
	D2461	RGP10J-5025-T3	SI.DIODE	
	D2462	1SS133-T2	SI.DIODE	
	D2463	1SS133-T2	SI.DIODE	
	D2501	1SS81-T5	SI.DIODE	
	D2521	V11CA-C1	SI.DIODE	
	D2522	FMV-3FU-F1	SI.DIODE	
	D2523	MTZJ22B-T2	ZENER DIODE	
	D2525	RGP10J-5025-T3	SI.DIODE	
	D2541	RGP10J-5025-T3	SI.DIODE	
	D2542	MTZJ3.9B-T2	ZENER DIODE	
	D2551	RGP10J-5025-T3	SI.DIODE	
	D2552	RGP10J-5025-T3	SI.DIODE	
	D2553	RH1S-T3	SI.DIODE	
	D2582	MTZJ7.5B-T2	ZENER DIODE	
	D2583	MTZJ7.5S-T2	ZENER DIODE	
⚠	D2584	RGP10J-5025-T3	SI.DIODE	
	D2901	D35B60	BRIDGE DIODE	
	D2902	RG1C-LFA1	SI.DIODE	

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⚠	Symbol No.	Part No.	Part Name	Description
	DIODE			
	D2904	EU2A-T2	SI.DIODE	
	D2905	1SS133-T2	SI.DIODE	
	D2906	MTZJ27B-T2	ZENER DIODE	
	D2907	1SS133-T2	SI.DIODE	
	D2908	1SS133-T2	SI.DIODE	
	D2910	MTZJ15B-T2	ZENER DIODE	
	D2911	1SS133-T2	SI.DIODE	
⚠	D2931	S1WB/A/60-4101	SI.DIODE	
	D2945	1SS133-T2	SI.DIODE	
	D2951	RU4AM-LFT2	SI.DIODE	
	D2952	RGP10J-5025-T3	SI.DIODE	
	D2953	RU4AM-LFT2	SI.DIODE	
	D2955	RU3YX-LFC4	SI.DIODE	
	D2956	RGP10J-5025-T3	SI.DIODE	
	D2958	MTZJ33B-T2	ZENER DIODE	
	D2959	RU3YX-LFC4	SI.DIODE	
	D2960	1SR124-400A-T2	SI.DIODE	
	D2961	1SS133-T2	SI.DIODE	
	D2981	1SS133-T2	SI.DIODE	
	D2984	1SS133-T2	SI.DIODE	
	D2985	1SS133-T2	SI.DIODE	
	TRANSISTOR			
	Q2421	DTC124ESA-T	DIGI.TRANSISTOR	
	Q2422	2SC1740S/QR/-T	SI.TRANSISTOR	
	Q2461	2SK2459N-F54	F.E.T.	
	Q2462-63	2SC1740S/QR/-T	SI.TRANSISTOR	
	Q2464	2SA933AS/QR/-T	SI.TRANSISTOR	
	Q2501	BSN304-T	F.E.T.	
⚠	Q2521	2SC5552-RL	SI.TRANSISTOR	H.OUT
	Q2581	2SA1208/ST/Z1-T	SI.TRANSISTOR	
	Q2582	DTC144ESA-T	DIGI.TRANSISTOR	
	Q2583	2SC1740S/QR/-T	SI.TRANSISTOR	
	Q2941-42	2SC1740S/QR/-T	SI.TRANSISTOR	
	IC			
	IC2401	AN5523	I.C(M)	
	IC2461	BA10393	I.C(MONO-ANA)	
	IC2551	BA12T	I.C(MONO-ANA)	
	IC2901	STR-F6667B/F7	I.C(HYBRID)	
⚠	IC2902	QAL0425-001	P.W.B.MODULE	
	IC2951	SE140N	I.C(HYBRID)	
	IC2954	BA05T	I.C(MONO-ANA)	
	IC2955	PQ3RD13	I.C(MONO-ANA)	
	OTHERS			
	CN2004-06	QGB1506M1-16	CONNECTOR	
	CN2014	QGA2501C5-06Z	EH POST HEADER	
⚠	CP2951	ICP-N75-Y	I.C.PROTECT	
⚠	CP2952	ICP-N75-Y	I.C.PROTECT	
⚠	CP2953	ICP-N75-Y	I.C.PROTECT	
⚠	CP2955	ICP-N75-Y	I.C.PROTECT	
	K2401	QQR0621-002Z	BEADS CORE	
	K2522-24	CE41832-001	LEAD CORE	
	K2901	QQR0679-001	FERRITE BEADS	
⚠	LF2901	QQR1095-001	LINE FILTER	
⚠	PC2901	PC123FY2	I.C(PH.COUPLER)	
⚠	RY2931	QSK0099-001	RELAY	
⚠	TH2901	QAD0133-9R0	P.THEMISTOR	

■CRT SOCKET P.W. BOARD ASS'Y (SMF-3402A-U2)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R3101	NRSA63J-223X	MG R	22kΩ 1/16W J
	R3102	NRSA63J-681X	MG R	680Ω 1/16W J
	R3103	NRSA63J-101X	MG R	100Ω 1/16W J
	R3104	NRSA63J-822X	MG R	8.2kΩ 1/16W J
	R3105	NRSA63J-102X	MG R	1kΩ 1/16W J
	R3106	NRSA63J-221X	MG R	220Ω 1/16W J
	R3107	NRSA63J-561X	MG R	560Ω 1/16W J
	R3109	NRSA63J-153X	MG R	15kΩ 1/16W J
	R3110	NRSA63J-222X	MG R	2.2kΩ 1/16W J
	R3111	NRSA63J-471X	MG R	470Ω 1/16W J
	R3112	NRSA63J-272X	MG R	2.7kΩ 1/16W J
	R3113-14	NRSA63J-152X	MG R	1.5kΩ 1/16W J
	R3115	NRSA63J-390X	MG R	39Ω 1/16W J
	R3116	QRG01GJ-101	OM R	100Ω 1W J
	R3117	NRSA63J-331X	MG R	330Ω 1/16W J
	R3122	NRSA63J-122X	MG R	1.2kΩ 1/16W J
	R3123	QRE121J-563Y	C R	56kΩ 1/2W J
	R3124	NRSA63J-470X	MG R	47Ω 1/16W J
	R3125	QRE121J-563Y	C R	56kΩ 1/2W J
	R3126	NRSA63J-470X	MG R	47Ω 1/16W J
	R3127	NRSA63J-122X	MG R	1.2kΩ 1/16W J
	R3128	NRSA63J-390X	MG R	39Ω 1/16W J
	R3129-30	QRE121J-2R7Y	C R	2.7Ω 1/2W J
	R3131	NRSA63J-390X	MG R	39Ω 1/16W J
	R3132	NRSA63J-121X	MG R	120Ω 1/16W J
	R3133	QRL029J-681	OM R	680Ω 2W J
⚠	R3134	QRZ9021-561	F R	560Ω 1W J
	R3204-06	NRSA63J-272X	MG R	2.7kΩ 1/16W J
	R3211	NRSA63J-154X	MG R	150kΩ 1/16W J
	R3223-25	NRSA63J-272X	MG R	2.7kΩ 1/16W J
	R3227	NRSA63J-103X	MG R	10kΩ 1/16W J
	R3228	NRSA63J-272X	MG R	2.7kΩ 1/16W J
	R3229-31	QRL029J-104-F	OM R	100kΩ 2W J
	R3232-34	NRSA63J-332X	MG R	3.3kΩ 1/16W J
	R3235-37	QRC121K-152Z	COMP.R	1.5kΩ 1/2W K
	R3239	QRZ0107-474Z	C R	470kΩ 1/2W K
	R3240	QRC121K-102Z	MF R	1kΩ 1/2W K
	R3241	QRZ0107-105Z	C R	1.0MΩ 1/2W K
	R3242	NRSA63J-103X	MG R	10kΩ 1/16W J
	R3244	NRSA63J-102X	MG R	1kΩ 1/16W J
	R3245-47	NRSA63J-562X	MG R	5.6kΩ 1/16W J
	R3301-02	QRE121J-474Y	C R	470kΩ 1/2W J
	R3303-04	NRSA63J-223X	MG R	22kΩ 1/16W J
	R3305	NRSA63J-562X	MG R	5.6kΩ 1/16W J
	R3306	NRSA63J-392X	MG R	3.9kΩ 1/16W J
	R3310	NRSA63J-0R0X	MG R	0.0Ω 1/16W J
	CAPACITOR			
	C3102	NDC31HJ-6R0X	C CAP.	6pF 50V J
	C3103	NDC31HJ-390X	C CAP.	39pF 50V J
	C3104	QCB31HK-103Z	C CAP.	0.01μF 50V K
	C3106	QETN1HM-335Z	E CAP.	3.3μF 50V M
	C3107	QETN1CM-107Z	E CAP.	100μF 16V M
	C3110	QETN2CM-106Z	E CAP.	10μF 160V M
	C3111	QCB32HK-472Z	C CAP.	4700pF 500V K
	C3113	QETN2CM-106Z	E CAP.	10μF 160V M
	C3114	QCB32HK-472Z	C CAP.	4700pF 500V K
	C3116-17	QETN1AM-107Z	E CAP.	100μF 10V M
	C3118	QETN1AM-337Z	E CAP.	330μF 10V M
	C3120-21	NDC31HJ-221X	C CAP.	220pF 50V J
	C3201-03	NDC31HJ-100X	C CAP.	10pF 50V J
	C3204-06	NCF31CZ-104X	C CAP.	0.1μF 16V Z
	C3207-09	QETN1EM-476Z	E CAP.	47μF 25V M
	C3210-12	QFK62EK-104Z	MM CAP.	0.1μF 250V K
	C3213-15	NDC31HJ-181X	C CAP.	180pF 50V J

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⚠	Symbol No.	Part No.	Part Name	Description
	CAPACITOR			
	C3216	QETN1CM-107Z	E CAP.	100µF 16V M
	C3218	QETM2EM-336	E CAP.	33µF 250V M
	C3219	QFZC097-223	MM CAP.	0.022µF 1250V K
	C3221	QETN2EM-106Z	E CAP.	10µF 250V M
	C3302	QETN1HM-476Z	E CAP.	47µF 50V M
	COIL			
	L3101	QQL244K-5R6Z	COIL	5.6µH K
	L3204	QQL26AJ-102Z	COIL	1mH J
	DIODE			
	D3101-02	MA111-X	SI.DIODE	
	D3103	RH1S-T3	SI.DIODE	
	D3104	RH1S-T3	SI.DIODE	
	D3204-06	EU01N-T2	SI.DIODE	
	D3207	RM2C-LFA1	SI.DIODE	
	D3208-10	1SR124-400A-T2	SI.DIODE	
	D3211	MA3062/M/-X	ZENER DIODE	
	D3301	MA111-X	SI.DIODE	
	D3303	MA111-X	SI.DIODE	
	TRANSISTOR			
	Q3101	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q3102	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q3103	2SC1906-T	SI.TRANSISTOR	
	Q3104	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q3105	2SC1627A/OY/-T	SI.TRANSISTOR	
	Q3108	2SA1837	SI.TRANSISTOR	
	Q3109	2SC4793	SI.TRANSISTOR	
	Q3301	2SA1037AK/QR/-X	SI.TRANSISTOR	
	IC			
	IC3201-03	TDA6111Q	I.C(MONO-ANA)	
	OTHERS			
	K3101	CE41492-001Z	CHOKE COIL	
	K3103-04	CE41492-001Z	CHOKE COIL	
	K3105	QQR0621-002Z	BEADS CORE	
	SG3201-03	QAF0056-501Z	VARISTOR	
⚠	SK3001	QNZ0464-001	C.R.T.SOCKET	
	W3003	QQR0679-001	FERRITE BEADS	
	W3022	QQR0679-001	FERRITE BEADS	

■ FRONT CONTROL P.W. BOARD ASS'Y (SMF-8402A-U2)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R8001-02	QRE121J-271Y	C R	270Ω 1/2W J
	R8005	NRSA63J-221X	MG R	220Ω 1/16W J
	R8008	NRSA63J-102X	MG R	1kΩ 1/16W J
	R8010	NRSA63J-103X	MG R	10kΩ 1/16W J
	R8012-13	NRSA63J-103X	MG R	10kΩ 1/16W J
	R8021-22	NRSA63J-102X	MG R	1kΩ 1/16W J
	R8035	QRE121J-151Y	C R	150Ω 1/2W J
	R8039	NRSA63J-331X	MG R	330Ω 1/16W J
	CAPACITOR			
	C8001-02	NCB31HK-103X	C CAP.	0.01µF 50V K
	C8004	NCB31CK-104X	C CAP.	0.1µF 16V K
	C8005	NDC31HJ-680X	C CAP.	68pF 50V J
	C8010-11	NCB31HK-472X	C CAP.	4700pF 50V K
	C8019	QETN1CM-107Z	E CAP.	100µF 16V M
	C8021	NCB31CK-104X	C CAP.	0.1µF 16V K
	C8022	QETN1EM-476Z	E CAP.	47µF 25V M
⚠	C8901	QFZ9072-474	MF CAP.	0.47µFAC275V K
	COIL			
	L8001	QQR0716-001Z	LEAD CORE	
	L8002-03	QQL244K-5R6Z	COIL	5.6µH K
	L8010-11	QQL244K-270Z	PEAKING COIL	
	L8012	QQR0716-001Z	LEAD CORE	
	DIODE			
	D8010	SPR-39MVWF	L.E.D.	
	D8011	MA111-X	SI.DIODE	
	D8014	MA3068/M/-X	ZENER DIODE	
	D8018	MA3033-X	ZENER DIODE	
	TRANSISTOR			
	Q8002	DTC124EKA-X	DIGI.TRANSISTOR	
	Q8003-04	DTA124EKA-X	DIGI.TRANSISTOR	
	IC			
	IC8001	GP1U281Q	IFR DETECT UNIT	
	OTHERS			
		CEMG002-001Z	FUSE CLIP	
		LC30596-001B-C	L.E.D.HOLDER	
		CM35921-005-H	CDS HOLDER	
⚠	F8901	QMF51D2-3R15J1	FUSE	3.15A
	J8001	QMS3004-C01	HEADPHONE JACK	
	J8003	QNZ0453-001	JACK	
	LC8002	NQR0169-001X	EMI FILTER	
⚠	LF8901	QQR1095-001	LINE FILTER	
	S8001	QSW0619-003Z	PUSH SWITCH	MENU
	S8002	QSW0619-003Z	PUSH SWITCH	CH DOWN
	S8003	QSW0619-003Z	PUSH SWITCH	CH UP
⚠	S8901	QSW0824-001	PUSH SWITCH	MAIN POWER

■ MICOM P.W. BOARD ASS'Y (SMF0M401A-U2)

Refer to PARTS LIST in page 42 for this P.W. board.

■ AV SW P.W. BOARD ASS'Y (SMF0S401A-U2)

Refer to PARTS LIST in page 43 for this P.W. board.

■ 100Hz P.W. BOARD ASS'Y (SMF0Z405A-U2)

Refer to PARTS LIST in page 44 for this P.W. board.

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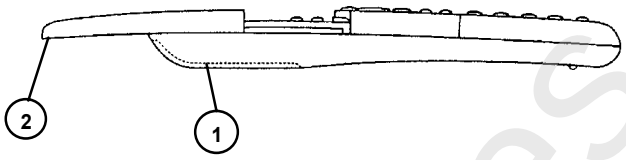
REMOTE CONTROL UNIT PARTS LIST

AV32H20EUS / AV28H20EUS (RM-C54H-1C)

⚠ Ref.No.	Part No.	Part Name	Description
1	2AA030733	BATTERY COVER	
2	2AA030732	SLIDE COVER	

AV28H20EUB (RM-C50-1C)

⚠ Ref.No.	Part No.	Part Name	Description
1	2AA027770	BATTERY COVER	
2	2AA027761	SLIDE COVER	



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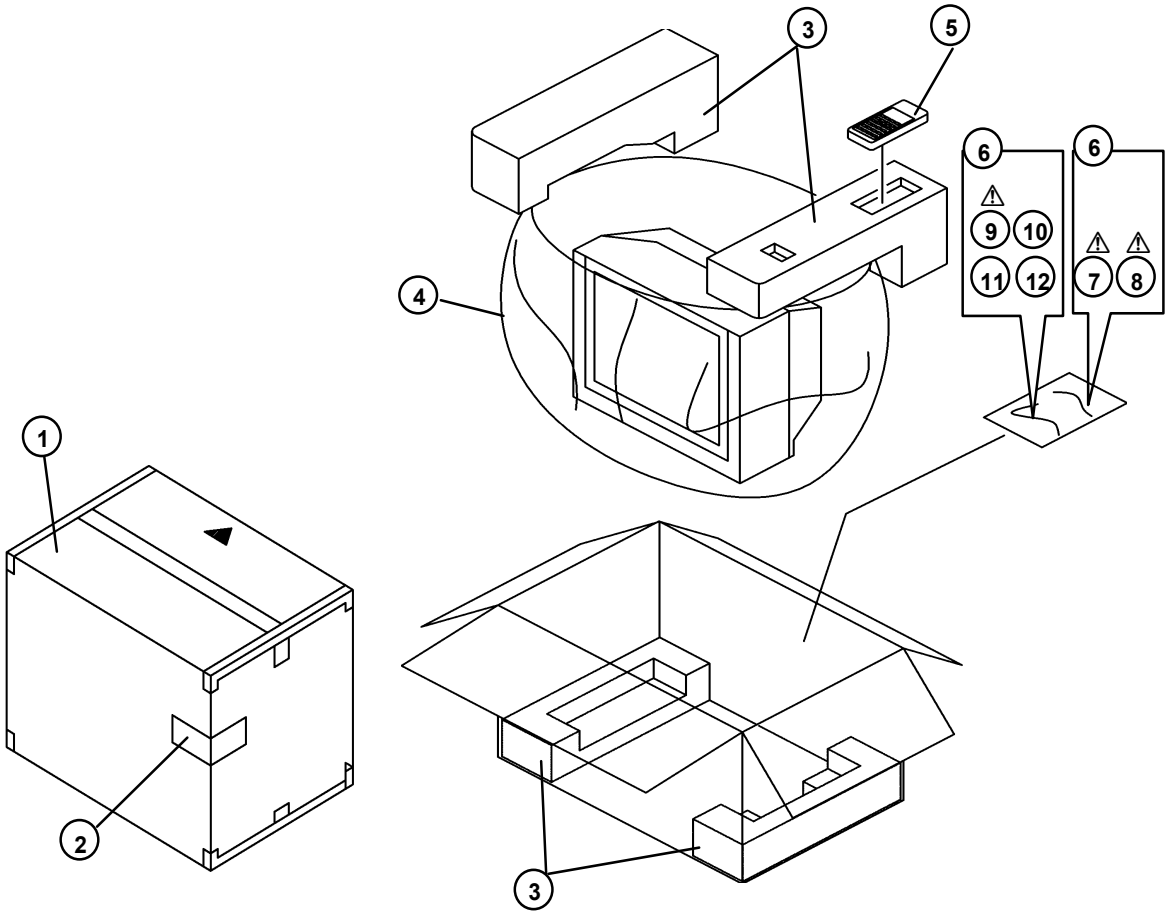
PACKING



PACKING PARTS LIST

AV32H20EUS

⚠	Ref.No.	Part No.	Part Name	Description
	1	AEM1002-E70-E	PACKING CASE	
	2	AEM1052-063-E	EURO LABEL	
	3	LC10384-002C-U	CUSHION ASSY	4pcs in 1set
	4	AEM1047-A02-E	POLY BAG	
	5	RM-C54H-1C	REMOCON UNIT	
	6	AEM3021-003A-E	POLY BAGS	(x2)
⚠	7	LCT1142-001A-U	INST.BOOK	
⚠	8	LCT1143-001A-U	INST.BOOK	
⚠	9	LCT1144-001A-U	INST.BOOK	
	10	BT-54013-1E	WARRANTY CARD	
	11	AEM1075-001A-U	X-RAY CARD	
	12	2832H20EU-HSAE	S.DIAGRAM	[ITALY EDITION]

AV28H20EUS / AV28H20EUB

⚠	Ref.No.	Part No.	Part Name	Description
	1	AEM1002-B68-E	PACKING CASE	
	2	AEM1052-064-E	EURO LABEL	[AV28H20EUS]
	2	AEM1052-096-E	EURO LABEL	[AV28H20EUB]
	3	LC10722-002A-U	CUSHION ASSY	4pcs in 1set
	4	AEM1047-A02-E	POLY BAG	
	5	RM-C54H-1C	REMOCON UNIT	[AV28H20EUS]
	5	RM-C50-1C	REMOCON UNIT	[AV28H20EUB]
	6	AEM3021-003A-E	POLY BAGS	(x2)
⚠	7	LCT1142-001A-U	INST.BOOK	
⚠	8	LCT1143-001A-U	INST.BOOK	
⚠	9	LCT1144-001A-U	INST.BOOK	
	10	BT-54013-1E	WARRANTY CARD	
	11	AEM1073-001A-U	X-RAY CARD	
	12	2832H20EU-HSAE	S.DIAGRAM	[ITALY EDITION]

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SERVICE MANUAL

COLOUR TELEVISION

BASIC CHASSIS
MF Ⅱ

AV32H20EUS/A

Supplementary

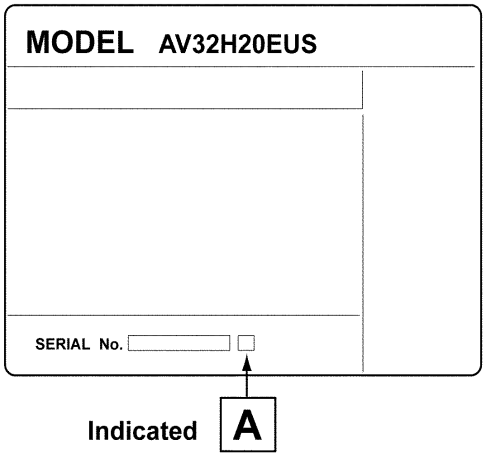
The following item for the AV32H20EUS/A model was changed partly from AV32H20EUS model. Therefore, this service manual describes only the items which differ from those of the AV32H20EUS model service manual.
For details other than those described in this manual, please refer to the AV32H20EUS model service manual (No.51945, Mar. 2002).

■ OUTLINE

Since the picture tube was changed, we have issued the SERVICE MANUAL for AV32H20EUS/A .

■ HOW TO IDENTIFY MODELS

A suffix "A" is added to the serial No. after at the Rating label.



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No.51945B
May 2002

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DIFFERENCE LIST

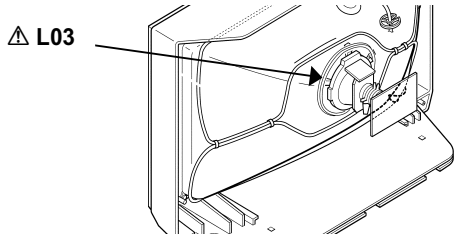
● USING PW BOARD (Page 32)

MODEL / PWB ASS'Y	AV32H20EUS	AV32H20EUS/A
POWER & DEF PWB	SMF-2401A-U2	**SMF-2407A-U2**
CRT SOCKET PWB	SMF-3401A-U2	**SMF-3405A-U2**

● EXPLODED VIEW PARTS LIST (Page 34)

⚠	Ref. No.	Parts No.		Parts Name
		AV32H20EUS	AV32H20EUS/A	
⚠	**V01**	W78QDD257X44	**W76ERF042X044**	PICTURE TUBE (ITC)
⚠	**L01**	QQW0105-001	**QQW0066-001**	DEGAUSSING COIL
⚠	**L03**	————	**QQW0130-001**	ROTATION COIL
⚠	**22**	LC20379-027A-U	**LC20379-028A-U**	RATING LABEL

EXPLODED VIEW



● PRINTED WIRING BOARD PARTS LIST

POWER & DEF P.W. BOARD ASS'Y (Page 38-40)

⚠	Symbol No.	Parts No.		Parts name	Description
		SMF-2401A-U2	SMF-2407A-U2		
	R2504-05	QRL039J-222	**QRL039J-272**	OM_R	2.7kΩ 3W J
⚠	R2910	QRE0197-100	**QFE121J-150Y**	C R	15Ω 1/2W J
⚠	C2526	QFZ0917-2014	**QFZ0197-184**	MPP CAP	0.18μF 250V J
⚠	C2527	QFZ0194-154	**QFZ0194-104**	MPP CAP	0.1μF 250V J
	L2522	QQR1191-001	**QQR1191-002**	LINEARITY COIL	

CRT SOCKET P.W. BOARD ASS'Y (Page 40)

⚠	Symbol No.	Parts No.		Parts name	Description
		SMF-3401A-U2	SMF-3405A-U2		
	R3111	NRSA63J-182X	**NRSA63J-152X**	MG R	1.5kΩ 1/16W J
	C3120	NDC31HJ-221X	**NDC31HJ-471X**	C CAP.	470pF 50V J

● PACKING PARTS LIST

⚠	Ref. No.	Parts No.		Parts Name
		AV32H20EUS	AV32H20EUS/A	
⚠	**11**	AEM1059-002A-U	**AEM1075-001A-E**	X-RAY CARD

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AV28H20EUS
AV28H20EUB

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Supplementary

We have changed the production country for some parts. As a result, some parts numbers have been changed. Therefore, this service manual describes only these parts number.
For others, please use the service manual for AV28H20EUS / AV28H20EUB (No.51945, May 2002) .

■ DIFFERENCE LIST

● USING PW BOARD (Page 32)

Model / PWB ASS'Y	AV28H20EUS / AV28H20EUB		Description
	Previous	New	
MAIN PWB	SMF-1402A-U2	←	Not change
POWER & DEF. PWB	SMF-2402A-U2	SMF-2402A-H3	Interchangeable
CRT SOCKET PWB	SMF-3402A-U2	SMF-3402A-H3	↑
FRONT CONTROL PWB	SMF-8402A-U2	SMF-8402A-H3	↑
MICOM PWB	SMF0M401A-U2	←	Not change
AV SW PWB	SMF0S401A-U2	SMF0S401A-H3	Interchangeable
100Hz PWB	SMF0Z405A-U2	←	Not change

Note:
The number of PWB have been changed because the production country of some PWBs has been changed. However, there is no change in component parts.

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JVC

SERVICE MANUAL

COLOUR TELEVISION

AV32H200EUS

BASIC CHASSIS
MF2

Supplementary

The following items for the AV32H200EUS model were changed partly from AV32H20EUS model. Therefore, this service manual describes only the items which differ from those of the AV32H20EUS model service manual.
For details other than those described in this manual, please refer to the AV32H20EUS model service manual (No.51945, Jul.2002).

OUTLINE

Changes according to the change of the model name are described here.

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DIFFERENCE LIST

EXPLODED VIEW PARTS LIST (Page 34)

	Ref. No.	PARTS No.		PARTS NAME	DESCRIPTION
		AV32H20EUS	AV32H200EUS		
	22	LC20379-027A-U	LC21144-001A-U	RATING LABEL	
	23	LC30789-002B-U	-	WARNING LABEL	Delete

PACKING PARTS LIST (Page 55)

	Ref. No.	PARTS No.		PARTS NAME	DESCRIPTION
		AV32H20EUS	AV32H200EUS		
	2	AEM1052-063-E	AEM1066-014-E	EURO LABEL	
	7	LCT1142-001A-U	-	INST BOOK	Delete
	9	LCT1144-001A-U	-	INST BOOK	Delete
	11	AEM1075-001A-U	-	X-RAY CARD	Delete
	12	2832H20EU-HSAE	-	S.DIAGRAM	Delete

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